THE MYSTERY OF EASTER ISLAND

THE STORY OF AN EXPEDITION

BY

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"WITH A PREHISTORIC PEOPLE: THE AKIKUYU OF BRITISH EAST AFRICA"

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TO THE MEMORY

OF

MY MOTHER

TO WHOM THE LETTERS WERE WRITTEN WHICH

HAVE FORMED A LARGE PORTION OF THE

MATERIAL FOR THIS BOOK, BUT WHO

WAS NO LONGER HERE TO

WELCOME OUR RETURN

PREFACE

As I sit down to write this preface there rises before me, not the other side of a London street, but the beautiful view over the harbour of St. Vincent, Cape Verde Islands, as seen from the British Consulate. It was a hot afternoon, but in that shady room I had found a fellow-woman and sympathetic listener. To her I had been pouring out, rather mercilessly as it seemed, the story of our interests and experiences, including the drowning of the tea in Las Palmas Harbour. When I had finished, she said quietly, "You are going to publish all this I suppose?" I hesitated, for the idea was new. "No," I replied, "we had not thought of doing so; of course, if we have any success at Easter Island we shall make it known, but this is all in the day's work." "I think," she said, "that there are many who lead quiet stay-at-home lives who would be interested." Times have changed since 1913, there are now few who have not had adventures, either in their own persons, or through those dear to them, compared with which ours were but pleasant play; but I still find that many of those who are good enough to care to hear what we did in those three years ask for personal details. After a lecture given to a learned society, which it had been an honour to be asked to address, I was accosted by a lady, invited for the occasion, with the remark, "I was disappointed in what you told us." My face fell. "You never said what you had to eat." This, and many similar experiences, are the apology for the trivialities of this work.

No attempt has been made to write any sort of a guide book to the varied places touched at by the yacht, neither space nor knowledge permitted; all that has been done either by pen or pencil is to try to give the main impression left on the mind of a passing dweller in their harbours and anchorages. It has, however, been found by experience that, in accounts of travel, the general reader loses much of the pleasure which has been

experienced by the writer, through knowledge being assumed of the history of the places visited; a knowledge which the traveller himself has absorbed almost unconsciously. Without some acquaintance with past events the present cannot be understood; at the risk, therefore, of interrupting the narrative, a few notes of such history have been included.

In dealing with the main topic of the work, an endeavour has been made to give some idea of the problem of Easter Island as the expedition found it, and also of its work there. With regard to this part, some appeal is necessary to the understanding kindness of the reader, for it has not been an easy tale to tell, nor one which could be straightforwardly recounted. The story of Easter is as yet a tangled skein. The dim past, to which the megalithic works bear witness—the island as the early voyagers found it—its more recent history and present state, all of these are intermingled threads, none of which can be followed without reference to the remaining clues.

For those who would have preferred more scientific and fewer personal details, I can only humbly say wait, there is another volume in prospect with descriptions and dimensions of some two hundred and sixty burial-places on the island, thousands of measurements of statues, and other really absorbing matter. The numerical statements in the present book, dealing with archæological remains, must be considered approximate till it has been possible to go again through the large collection of notes.

It is fairly obvious why the writing of this story has fallen to the share of the sole feminine member of the expedition. I had also, what was, in spite of all things, the good fortune to be fourteen weeks longer on the island than my husband. They were fat weeks too, when the first lean ones, with their inevitable difficulties, were past; and the unsettlement towards the end had not arrived. He has, I need hardly say, given me every assistance with this work. Generally speaking, all things which it is possible to touch and handle, buildings, weapons, and ornaments, were in his department; while things of a less tangible description, such as religion, history, and folk-lore fell to my lot. Those who know him will recognise his touches throughout, and the account of the last part of the voyage, after my return to England, has been written by him.

The photographs, when not otherwise stated, are by members

of the Expedition. The drawings are from sketches made by the Author; those of the burial-places are from notebook outlines made in the course of work. The diagrams of the houses and burial-places are by my husband.

We are deeply grateful, both personally and on behalf of the Expedition, for all the aid, both public and private, extended to our work in the interests of science. We hesitate to allude to it in detail in connection with what may, it is to be feared, seem an unworthy book, but we cannot refrain from taking this, the earliest, opportunity of acknowledging our obligations. The Admiralty lent the Expedition a Lieutenant on full pay for navigation and survey. The Royal Society honoured it by bestowing a grant of £100, and the British Association by appointing a committee to further its interests accompanied by a small gift. Valuable scientific instruments were lent by both the Admiralty and Royal Geographical Society.

We are indebted to Sir Hercules Read and Captain T. A. Joyce, of the Ethnological Department of the British Museum, for the initial suggestion and much personal help. In our own University of Oxford the practical sympathy of Dr. Marett has been fully given from the time the project was first mooted till he read the proofs of the scientific part of this work; we owe more to such encouragement for any success attained than perhaps he himself realises. Mr. Henry Balfour has placed us, and all who are interested in the subject, under the greatest obligation for his work on our results which has thrown a flood of light on the culture of Easter Island, and has, in perhaps greater degree than anything else, made the Expedition seem "worth while." Dr. Rivers, of Cambridge, kindly undertook the position of Correspondent in connection with the committee of the British Association, and has put at our disposal his great knowledge of the Pacific. Dr. Haddon has also been good enough to allow us to avail ourselves of his intimate acquaintance with its problems. Dr. Corney has rendered constant and unique assistance with regard to the accounts of Easter Island as given by the early voyagers, a line of research most important in its bearings. Our thanks are due to Dr. Seligman for kind interest, to Professor Keith for his report on the two Pitcairn Islanders who returned with the yacht,

and his examination of our osteological collection; to Dr. Thomas of the Geological Survey for his report of the rocks brought back; and not least to Mr. Sydney Ray, who has given most valuable time to our vocabularies of the language.

With regard to our journeyings and labours in the field, we are under great obligation to Mr. Edwards, the Chilean Minister in London, through whose representations his Government were good enough to grant us special facilities in their ports. The Expedition owes much to Messrs. Balfour & Williamson of London, and the firms connected with them in Chile, California, and New York; most especially to Messrs. Williamson & Balfour of Valparaiso for their permission to visit Easter Island and help throughout. We are also very grateful to the manager of the ranch, Mr. Percy Edmunds, for his practical aid on the island; since we left he has obtained for us a skin of the sacred bird which we had been unable to procure, and forwarded with it the negative of fig. 65, taken at our request.

It has been impossible in the compass of this book to express our gratitude to all those who gave help and hospitality on both the outward and homeward voyage. We can only ask them to believe that we do not forget, and that the friendship of many is, we trust, a permanent possession.

For professional help in the production of this book it is a pleasure to acknowledge the skill and patience of Miss A. Hunter, who has assisted in preparing the sketches, and of Mr. Gear, President of the Royal Photographic Society, who has worked up the negatives; also of Mr. F. Batchelor, of the Royal Geographical Society, who has drawn all the maps.

It has not, as will be readily understood, been always an easy matter to write of such different interests amidst the urgent claims and stupendous events since the time of our return; but if any soul rendered sad by the war, or anxiously facing the problems of a new world, finds a few hours' rest surrounded by the blue of the sea or face to face with the everlasting calm of the great statues, then it will give very real happiness to

THE STEWARDESS OF THE *MANA*.

February 1919.

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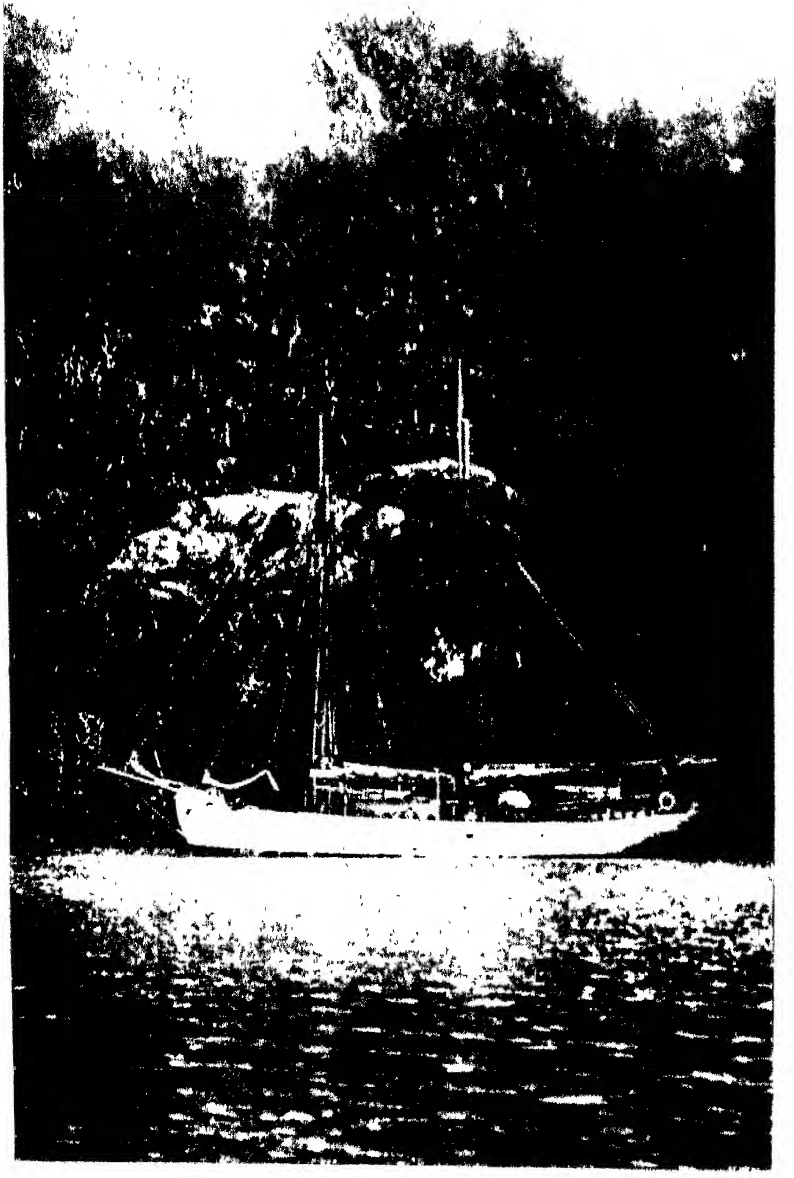


M.I.N.I.

Charua Bay, Patagonian Channels.

CHAPTER I

THE START

Why we went to Easter Island—The Building and Equipping of the Yacht—The Start from Southampton—Dartmouth—Falmouth.

"ALL the seashore is lined with numbers of stone idols, with their backs turned towards the sea, which caused us no little wonder, because we saw no tool of any kind for working these figures." So wrote, a century and a half ago, one of the earliest navigators to visit the Island of Easter in the South-east Pacific. Ever since that day passing ships have found it incomprehensible that a few hundred natives should have been able to make, move, and erect numbers of great stone monuments, some of which are over thirty feet in height; they have marvelled and passed on. As the world's traffic has increased Easter Island has still stood outside its routes, quiet and remote, with its story undeciphered. What were these statues of which the present inhabitants know nothing? Were they made by their ancestors in forgotten times or by an earlier race? Whence came the people who reached this remote spot? Did they arrive from South America, 2,000 miles to the eastward? Or did they sail against the prevailing wind from the distant islands to the west? It has even been conjectured that Easter Island is all that remains of a sunken continent. Fifty years ago the problem was increased by the discovery on this mysterious land of wooden tablets bearing an unknown script; they too have refused to yield their secret.

When, therefore, we decided to see the Pacific before we died, and asked the anthropological authorities at the British Museum what work there remained to be done, the answer was, "Easter Island." It was a much larger undertaking than had been contemplated; we had doubts of our capacity for so

important a venture; and at first the decision was against it, but we hesitated and were lost. Then followed the problem how to reach the goal. The island belongs to Chile, and the only regular communication, if regular it can be called, was a small sailing vessel sent out by the Chilean Company, who use the island as a ranch; she went sometimes once a year, sometimes not so often, and only remained there sufficient time to bring off the wool crop. We felt that the work on Easter ought to be accompanied with the possibility of following up clues elsewhere in the islands, and that to charter any such vessel as could be obtained on the Pacific coast, for the length of time we required her, would be unsatisfactory, both from the pecuniary standpoint and from that of comfort. It was therefore decided, as Scoresby is a keen yachtsman, that it was worth while to procure in England a little ship of our own, adapted to the purpose, and to sail out in her. As the Panama Canal was not open, and the route by Suez would be longer, the way would lie through the Magellan Straits.

Search for a suitable vessel in England was fruitless, and it became clear that to get what we wanted we must build. The question of general size and arrangement had first to be settled, and then matters of detail. It is unfortunate that the precise knowledge which was acquired of the exact number of inches necessary to sleep on, to sit on, and to walk along is not again likely to be useful. The winter of 1910–11 was spent over this work, but the professional assistance obtained proved to be incompetent, and we had to begin again; the final architect of the little yacht was Mr. Charles Nicholson, of Gosport, and the plans were completed the following summer. They were for a vessel of schooner rig and auxiliary motor power The length over all was 90 feet, and the water-line 72 feet; her beam was 20 feet. The gross tonnage was 91 and the yacht tonnage was 126.

The vessel was designed in four compartments, with a steel bulkhead between each of the divisions, so that in case of accident it would be possible to keep her afloat. Aft was the little chart-room, which was the pride of the ship. When we went on board magnificent yachts which could have carried our little vessel as a lifeboat, and found the navigation being done in the public rooms, we smiled with superiority. Out of

the chart-room were the navigator's sleeping quarters, and in the overhang of the stern the sail-locker. The next compartment was given to the engines, and made into a galvanised iron box in case of fire. It contained a motor engine for such work as navigation in and out of harbour and traversing belts of calm. This was of 38 h.p. and run on paraffin, as petrol was disallowed by the insurance; it gave her 5½ knots. In the same compartment was the engine for the electric light: in addition the yacht had steam heating. The spaces between the walls of the engine-box and those of the ship were given to lamps, and to boatswain's stores.

Then came the centre of the ship, containing the quarters of our scientific party. The middle portion of this was raised three or four feet for the whole length, securing first a deck-house and then a heightened roof for the saloon below, an arrangement which was particularly advantageous, as no port-holes were allowed below decks, leaving us dependent on sky-lights and ventilators. Entering from without, two or three steps led down into the deck-house, which formed part of the saloon, but at a higher level; it was my chief resort throughout the voyage. On each side was a settee, which was on the level of the deck, and thus commanded a view through port-holes and door of what was passing outside; one of these settees served as a berth in hot weather. A small companion connected the deck-house with the saloon below: the latter ran across the width of the ship; it also had full-length settees both sides, and at the end of each was a chiffonier. On the port side was the dinner-table, which swung so beautifully that the fiddles were seldom used, and the thermos for the navigating officer could be left happily on it all night. Starboard was a smaller table, fitted for writing; and a long bookshelf ran along the top of the for'ardside (fig. 1A).

On the afterside of the saloon a double cabin opened out of it, and a passage led to two single cabins and the bathroom. The cabins were rather larger than the ordinary staterooms of a mail steamer, and the arrangements of course more ample; every available cranny was utilised for drawers and lockers, and in going ashore it was positive pain to see the waste of room under beds and sofas and behind washing-stands. My personal accommodation was a chest of drawers and hanging

wardrobe, besides the drawers under the berth and various lockers. Returning to the saloon, a door for'ard opened into the pantry, which communicated with the galley above, situated on deck for the sake of coolness. For'ard again was a whole section given to stores, and beyond, in the bows, a roomy forecastle. The yacht had three boats—a lifeboat which contained a small motor engine, a cutter, and a dinghy; when we were at sea the two former were placed on deck, but the dinghy, except on one occasion only, was always carried in the davits, where she triumphantly survived all eventualities, a visible witness to the buoyancy of the ship.

While the plans were being completed, search was being made for a place where the vessel should be built; for though nominally a yacht, the finish and build of the Solent would have been out of place. It had been decided that she should be of wood, as easier to repair in case of accident where coral reefs and other unseen dangers abound; but the building of wooden walls is nearly extinct. The west country was visited, and an expedition made to Dundee and Aberdeen, but even there, the old home of whalers, ships are now built of steel; finally we fixed on Whitstable, from which place such vessels still ply round the coast. The keel was laid in the autumn of 1911; the following spring we took up our abode there to watch over her, and there in May 1912 she first took the water, being christened by the writer in approved fashion. "I name this ship *Mana*, and may the blessing of God go with her and all who sail in her"—a ceremony not to be performed without a lump in the throat. The choice of a name had been difficult; we had wished to give her one borne by some ship of Dr. Scoresby, the Arctic explorer, a friend of my husband's family whose name he received, but none of them proved to be suitable. The object was to find something which was both simple and uncommon; all appellations that were easy to grasp seemed to have been already adopted, while those that were unique lent themselves to error. "How would it do in a cable?" was the regulation test. Finally we hit on *Mana*, which is a word well known to anthropologists, and has the advantage of being familiar throughout the South Seas. We generally translated it somewhat freely as "good luck." It means, more strictly, supernatural power: a Polynesian would, for instance, describe

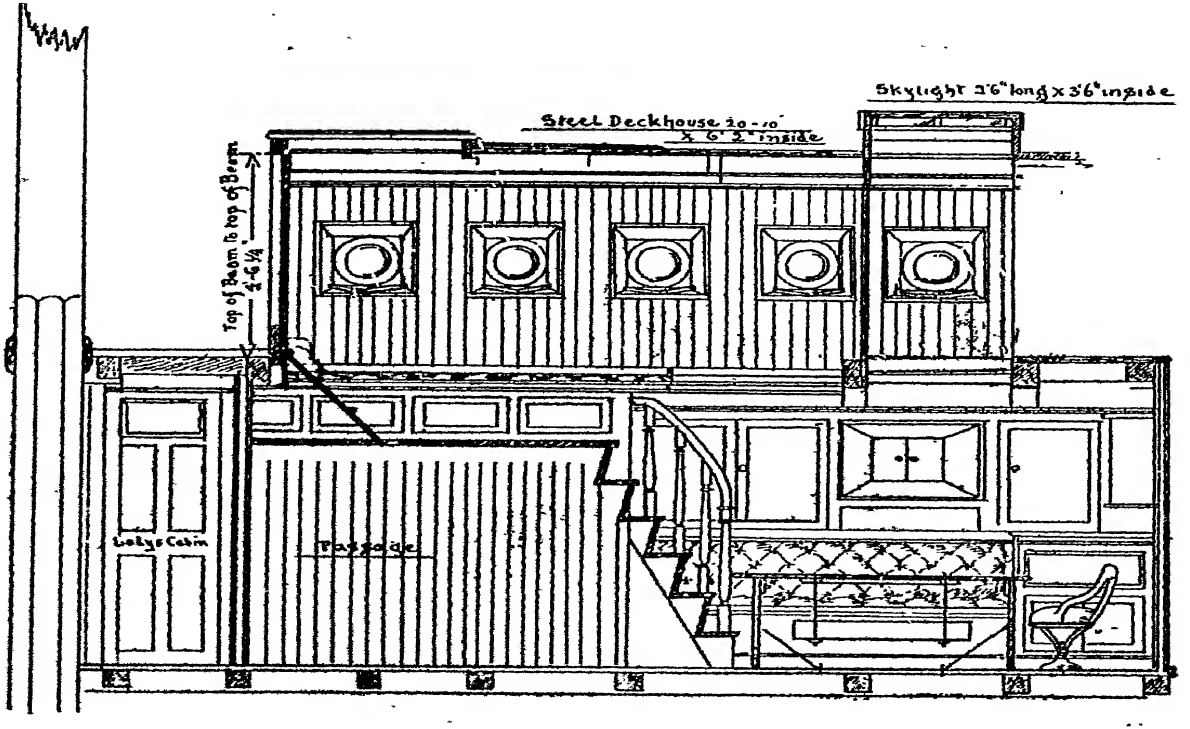


FIG. I[A].—*MANA*. SECTION OF DECKHOUSE AND SALOON.

the common idea of the effect of a horseshoe by saying that the shoe had "mana." From a scientific standpoint mana is probably the simplest form of religious conception. The yacht flew the burgee of the Royal Cruising Club.

From the time the prospective expedition became public we received a considerable amount of correspondence from strangers: some of it was from those who had special knowledge of the subject, and was highly valued; other letters had a comic element, being from various young men, who appeared to think that our few berths might be at the disposal of anyone who wanted to see the world. One letter, dated from a newspaper office, stated that its writer had no scientific attainments, but would be glad to get up any subject required in the time before sailing; the qualification of another for the post of steward was that he would be able to print the menus and ball programmes. The most quaint experience was in connection with a correspondent who gave a good name and address, and offered to put at our disposal some special knowledge on the subject of native lore, which he had collected as Governor of one of the South Sea islands. On learning our country address, he wrote that he was about to become the guest of some of our neighbours and would call upon us. It subsequently transpired that they knew nothing of him, but that he had written to them, giving our name. He did, in fact, turn up at our cottage during our absence, and obtained an excellent tea at the expense of the caretaker. The next we heard of him was from the keeper of a small hotel in the neighbourhood of Whitstable, where he had run up a large bill on the strength of a statement that he was one of our expedition, and we found later that he had shown a friend over the yacht while she was building, giving out he was a partner of my husband. We understand that after we started he appeared in the county court at the instance of the unfortunate innkeeper.

After much trouble we ultimately selected two colleagues from the older universities. The arrangement with one of these, an anthropologist, was, unfortunately, a failure, and ended at the Cape Verde Islands. The other, a geologist, Mr. Frederick Lowry-Corry, took up intermediate work in India, and subsequently joined us in South America. The Admiralty was good enough to place at our disposal a lieutenant on full pay for

navigation, survey, and tidal observation. This post was ultimately filled by Lieutenant D. R. Ritchie, R.N.

With regard to the important matter of the crew, it was felt that neither merchant seamen nor yacht hands would be suitable, and a number of men were chosen from the Lowestoft fishing fleet. Subsequent delays, however, proved deleterious, the prospective " dangers " grew in size, and the only one who ultimately sailed with us was a boy, Charles C. Jeffery, who was throughout a loyal and valued member of the expedition. The places of the other men were supplied by a similar class from Brixham, who justified the selection. The mate, Preston, gave much valuable service, and one burly seaman in particular, Light by name, by his good-humour and intelligent criticism added largely to the amenity of the voyage. An engineer, who was also a photographer, was obtained from Glasgow. We were particularly fortunate in our sailing master, Mr. H. J. Gillam. He had seen, while in Japan, a notice of the expedition in a paper, and applied with keenness for the post; to his professional knowledge, loyalty, and pleasant companionship the successful achievement of the voyage is very largely due. The full complement of the yacht, in addition to the scientific members, consisted of the navigator, engineer, cook-steward, under-steward, and three men for each watch, making ten in all. S. was official master, and I received on the books the by no means honorary rank of stewardess.

Whitstable proved to be an unsuitable place for painting, so *Mana* made her first voyage round to Southampton Water, where she lay for a while in the Hamble River, and later at a yacht-builder's in Southampton. The steward on this trip took to his bed with seasickness; but as he was subsequently found surreptitiously eating the dinner which S. had been obliged to cook, we felt that he was not likely to prove a desirable shipmate, and he did not proceed further. We had hoped to sail in the autumn, but we had our full share of the troubles and delays which seem inevitably associated with yacht-building: the engine was months late in the installation, and then had to be rectified; the painting took twice as long as had been promised; and when we put out for trial trips there was trouble with the anchor which necessitated a return to harbour. The friends who had kindly assembled in July at the Hans Crescent

Hotel to bid us good speed began to ask if we were ever really going to depart. We spent the winter practically living on board, attending to these affairs and to the complicated matter of stowage.

The general question of space had of course been very carefully considered in the original designs. The allowance for water was unusually large, the tanks containing sufficient for two, or with strict economy for three months; the object in this was not only safety in long or delayed passages, but to avoid taking in supplies in doubtful harbours. Portions of the hold had to be reserved of course for coal, and also for the welded steel tanks which contained the oil. When these essentials had been disposed of, still more intricate questions arose with regard to the allotment of room ; it turned out to be greater than we had ventured to hope, but this in no way helped as every department hastened to claim additional accommodation and to add something more to its stock. Nothing was more surprising all through the voyage than the yacht's elasticity: however much we took on board we got everything in, and however much we took out she was always quite full.

The outfit for the ship had of course been taken into consideration, but as departure drew near it seemed, from the standpoint of below decks, to surpass all reason ; there were sails for fine weather and sails for stormy weather, and spare sails, anchors, and sea-anchors, one-third of a mile of cable, and ropes of every size and description.

As commissariat officer, the Stewardess naturally felt that domestic stores were of the first importance. Many and intricate calculations had been made as to the amount a man ate in a month, and the cubic space to be allowed for the same. It had been also a study in itself to find out what must come from England and what could be obtained elsewhere; kind correspondents in Buenos Aires and Valparaiso had helped with advice, and we arranged for fresh consignments from home to meet us in those ports, of such articles as were not to be procured there or were inordinately expensive. The general amount of provisions on board was calculated for six months, but smaller articles, such as tea, were taken in sufficient quantities for the two years which it was at the time assumed would be the duration of the trip. We brought back on our return a

considerable amount of biscuits, for it was found possible to bake on board much oftener than we had dared to hope. As a yacht we were not obliged to conform to the merchant service scale of provisions, our ship's articles guaranteeing "sufficiency and no waste." The merchant scale was constantly referred to, but it is, by universal agreement, excessive, and leads to much waste, as the men are liable to claim what they consider their right, whether they consume the ration or not; the result is that a harbour may not unfrequently be seen covered with floating pieces of bread, or even whole loaves. The quantity asked for by our men of any staple foods was always given, and there were the usual additions, but we subsisted on about three-fourths of the legal ration. We had only one case of illness requiring a doctor, and then it was diagnosed as "the result of over-eating." It was a source of satisfaction that we never throughout the voyage ran short of any essential commodity.

There were other matters in the household department for which it was even more difficult to estimate than for the actual food—how many cups and saucers, for example, should we break per month, and how many reams of paper and gallons of ink ought we to take. Our books had of course to be largely scientific, a sovereign's worth of cheap novels was a boon, but we often yearned unutterably for a new book. Will those who have friends at the ends of the earth remember the godsend to them of a few shillings so invested, as a means of bringing fresh thoughts and a sense of civilised companionship? For a library for the crew we were greatly indebted to the kindness of Lord Radstock and the Passmore Edwards Ocean Library. We were subsequently met at every available port by a supply of newspapers, comprising the weekly editions of the *Times* and *Daily Graphic*, the *Spectator*; and the papers of two Societies for Women's Suffrage.

In addition to the requirements for the voyage the whole equipment for landing had to be foreseen and stowed, comprising such things as tents, saddlery, beds, buckets, basins, and cooking-pots. We later regretted the space given to some of the enamelled iron utensils, as they can be quite well procured in Chile, while cotton and other goods which we had counted on procuring there for barter were practically unobtainable.

Some sacks of old clothes which we took out for gifts proved most valuable. Among late arrivals that clamoured for peculiar consideration were the scientific outfits, which attained to gigantic proportions. S., who had studied at one time at University College Hospital, was our doctor, and the medical and surgical stores were imposing: judging from the quantity of bandages, we were each relied on to break a leg once a month. Everybody had photographic gear; the geologist appeared with a huge pestle and other goods; there was anthropological material for the preserving of skulls; the surveying instruments looked as if they would require a ship to themselves; while cases of alarming size arrived from the Admiralty and Royal Geographical Society, containing sounding machines and other mysterious articles. The owners of all these treasures argued earnestly that they were of the essence of the expedition, and must be treated with respect accordingly. Then of course things turned up for which everyone had forgotten to allow room, such as spare electric lamps, also a trammel and seine, each of fifty fathoms, to secure fish in port. Before we finally sailed a large consignment appeared of bonded tobacco for the crew, and the principal hold was sealed by the Customs, necessitating a temporary sacrifice of the bathroom for last articles.

This packing of course all took time, especially as nothing could be allowed to get wet, and a rainy or stormy day hung up all operations. Finally, however, on the afternoon of February 28th, 1913, the anchor was weighed, and we went down Southampton Water under power. We were at last off for Easter Island!

We had a good passage down the Channel, stopped awhile at Dartmouth, for the Brixham men to say good-bye to their families, and arrived at Falmouth on March 6th. Here there was experienced a tiresome delay of nearly three weeks. The wind, which in March might surely have seen its way to be easterly, and had long been from that direction, turned round and blew a strong gale from the south-west. The harbour was white with little waves, and crowded with shipping of every description, from battleships to fishing craft. Occasionally a vessel would venture out to try to get round the Lizard, only to return beaten by the weather. We had while waiting the sad privilege of rendering a last tribute to our friend Dr. Thomas

Hodgkin, the author of *Italy and her Invaders*, who just before our arrival had passed where " tempests cease and surges swell no more." He rests among his own people in the quiet little Quaker burial-ground.

It was not till Lady Day, Tuesday, March 25th, that the wind changed sufficiently to allow of departure; then there was a last rush on shore to obtain sailing supplies of fresh meat, fruit, and vegetables, and to send off good-bye telegrams. Everything was triumphantly squeezed in somewhere and carefully secured, so that nothing should shift when the roll began. The only articles which found no home were two sacks of potatoes, which had to remain on the cabin floor, because the space assigned to them below hatches had, in my absence on shore, been nefariously appropriated by the Sailing-master for an additional supply of coal.

It was dark before all was ready, and we left Falmouth Harbour with the motor; then out into the ocean, the sails hoisted, the Lizard Light sighted, and good-bye to England!

" Two years," said our friends, " that is a long time to be away." " Oh no," we had replied; " we shall find when we come back that everything is just the same; it always is. You will still be talking of Militants, and Labour Troubles, and Home Rule; there will be a few new books to read, the children will be a little taller—that will be all." But the result was otherwise.

CHAPTER II

THE VOYAGE TO SOUTH AMERICA

A Gale at Sea—Madeira—Canary Islands—Cape Verde Islands—Across the Atlantic.

THE first day in open ocean was spent in shaking down; on going on deck before turning in it was found to be a clear starlight night, and the man at the wheel prophesied smooth things. It was a case of—

> "A little ship was on the sea,
> It was a pretty sight,
> It sailed along so pleasantly,
> And all was calm and bright."

But, alas! the storm did soon begin to rise; by morning we were in troubled waters, and by noon we were battened down and hove to. We had given up all idea of making progress and were riding out the gale as best we might. All the saloon party were more or less laid low, including Mr. Ritchie, for the first time in his life. The steward was not seen for two days; and if it had not been that the under-steward, who shall be known as "Luke," rose to the occasion, the state of affairs would have been somewhat serious. He not only contrived to satisfy the appetites of the crew, which were subsequently said to have been abnormally good, but also staggered round, with black hands and a tousled head, ministering with tea and bovril to our frailer needs. The engineer, a landsman, was too incapacitated to do any work, and doubt arose as to whether we should not be left without electric light. More alarming was the fact that the place smelt badly of paraffin, arousing anxiety as to the effect the excessive rolling of the ship might have had on our carefully tested tanks and barrels; happily the odour proved to be due merely to a temporary overflow in the engine-room.

We now found the disadvantage of having abandoned, owing to our various delays, the trial runs in home waters which had at one time been planned. The skylights, which would have been adequate for ordinary yachting—which has been described as "going round and round the Isle of Wight"—proved unequal to the work expected of *Mana*, and the truth appeared of a dark saying of the Board of Trade surveyor that "skylights were not ventilation." Not only could they of course not be raised in bad weather, but those which, like mine, were arranged to open, admitted the sea to an unpleasant degree; such an amount of water had to be conveyed by means of dripping towels into canvas baths that it seemed at one time as if the Atlantic would be perceptibly emptier. When in the midst of the gale night fell on the lonely ship the sensation was eerie; every now and then the persistent rolling, which threw from side to side of the berth those fortunate enough to be below, was interrupted by a resounding crash in the darkness as a big wave broke against the vessel's side, followed by the rushing surge and gurgle of the water as it poured in a volume over the deck above. Then the hubbub entirely ceased, and for a perceptible time the vessel lay perfectly still in the trough of the wave, like a human creature dazed by a sudden blow, after a second or two to begin again her weary tossing. I wondered, as I lay there, which was the more weird experience, this night or one spent in camp in East Africa with no palisade, in a district swarming with lions, and again recalled the philosophy of one of our Swahili boys. "Frightened? No, he eats me, he does not eat me; it is all the will of Allah."

By morning the worst was over, and it was a comfort to hear Mr. Gillam singing cheerfully something about "In the Bay of Biscay O," a performance he varied with anathemas on the seasick steward. When I was able to get on deck, the waves were still descending on us—if not the proverbial mountains, at any rate hills high, looking as if they must certainly overwhelm us. It was wonderful to see, what later I took for granted, how the yacht rose to each, taking it as it were in her stride. It was reported to have been a "full gale, a hurricane, as bad as could be, with dangerous cross seas"; but the little vessel had proved herself a splendid sea-going boat, and "had ridden it out like a duck." For the next little while

I can only say in the words of the poet, "It was not night, it was not day"; neither the clothes people wore, nor the food they took, nor their times of downsitting and uprising had anything to do with the hours of light and darkness. By Saturday, however, the weather was better, meals were established, and things generally more civilised. We had another bad gale somewhere in the latitude of Finisterre, being hove to for thirty hours, but were subsequently very little troubled with seasickness. The second Sunday out, April 6th, we experienced a short interlude of calm, and I discovered that not only does a sailing ship not travel in bad weather, but that when it is really beautifully smooth she also has a bad habit of declining to go. Anyway, we held our first service, and "O God, our help" went, if not in Westminster Abbey form, at any rate quite creditably.

Mr. Ritchie had decided to take two sides of a triangle, first west and then south, rather than run any risk of being blown on to Ushant or Finisterre; a precaution which, in view of the proved powers of the boat to hold her own against a head wind, he subsequently thought to have been unnecessary. After we left the English shores we only saw two vessels till we were within sight of Madeira, and some of our Brixham men, who had never been far from their native shores or away from their fishing fleet, were much impressed with the size and loneliness of the ocean. "It was astonishing," said Light, "that there could be so much water without any land or ships," and he expressed an undisguised desire for "more company."

Somehow or other we had all come to the conclusion that we would put into Madeira, instead of going straight through to Las Palmas, for which we had cleared from Falmouth. The first land which we sighted was the outlying island of the group, Porto Santo. This was appropriate on a voyage to the New World, as Columbus resided there with his father-in-law, who was governor of the place; and it is said that from his observations there of driftwood, and other indications, he first conceived the idea of the land across the waters, to which he made his famous voyage in 1492. Our mate entertained us with a tale of how he had been shipwrecked on Porto Santo, the yacht on which he was serving having overrun her reckonings as she approached it from the west; happily all on board were

able to escape. The wind fell after we made the group, so that we did not get into the harbour of Funchal for another thirty-six hours, and then only with the help of the motor. It was most enjoyable cruising along the coast of Madeira, watching the great mountains, woods, ravines, and nestling villages, at whose existence the passengers on the deck of a Union-Castle liner can only vaguely guess. The day was Sunday, April 13th, and later it became a matter of remark how frequently we hit off this day of the week for getting into harbour, a most inconvenient one from the point of view of making the necessary arrangements. As we entered, a Portuguese liner, coming out of Funchal, dipped its flag in greeting to our blue ensign; out came the harbour-master's tug to show us where to take up our position, down went the anchor with a comfortable rattle, and so ended the first stage of our journey.

The voyage had taken eighteen days, and averaged about sixty miles a day, as against the hundred miles on which we had calculated, and which later we sometimes exceeded. A man who crosses the ocean in a powerful steam-vessel, as one who travels by land in an express train, undoubtedly gains in speed, but he loses much else. He misses a thousand beauties, he has no contact with Nature, no sense of the exultation which comes from progress won step by step by putting forth his own powers to bend hers to his will. The late veteran seaman Lord Brassey is reported to have said that "when once an engine is put into a ship the charm of the sea is gone." All through our voyage also there was a fascinating sense of having put back the hands of time. This was the route and these in the main the conditions under which our ancestors, the early Empire builders, travelled to India; later we were on the track of Drake, Anson, and others. Some of Drake's ships were apparently about the size of *Mana*.[1] The world has been shrinking of late, and to return to a simpler day is to restore much of its size and dignity.

[1] The *Pelican*, or *Golden Hinde*, was 120 tons; the *Elizabeth* 80 tons, and three smaller ships were 50, 30, and 12 tons respectively. The crews all told were 160 men and boys.—Froude's *English Seamen*, p. 112.

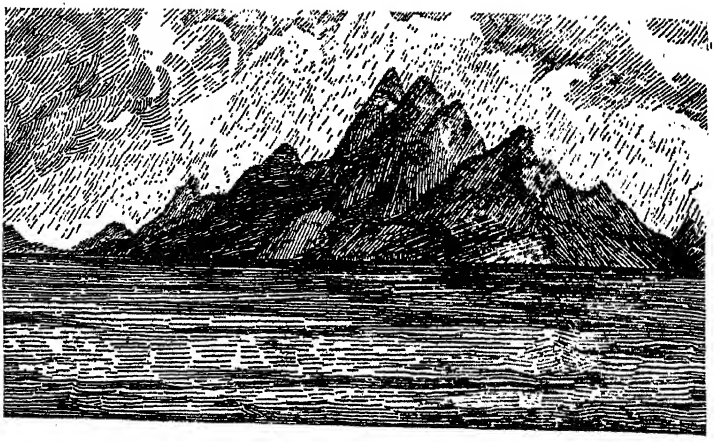


FIG. 2.—PORTO SANTO.

MADEIRA

Madeira was settled by the Portuguese early in the fifteenth century. With the exception of an interlude in the Napoleonic wars, when it was taken by England, it has ever since been a possession of that country.

Funchal, with its sunshine and its smiling houses, is well known to all travellers to South Africa. The season was just over, but the weather was still pleasantly cool, and flowers covered the walls with great masses of colour. We were there three days, and occupied our time in the usual way by ascending the hill above the town in the funicular railway, but instead of descending in the picturesque toboggans we came down on foot. The walk took about two hours down a path which is paved the whole way, representing a very large amount of labour. We regretted that we were unable to stay longer and see something of the life in those lonely cottages among the mountains, which we had seen from the sea, where the women are said to add considerably to their income by the embroidery for which the island is famous. Since our visit Funchal, as belonging to one of the Allies, has suffered in the Great War through enemy action, having been shelled from the sea and the shipping in the harbour sunk by a German raid.

GRAND CANARY

The Canary group consists of some nine islands, of which the most important are Teneriffe and Grand Canary. They have been known from the earliest times, but European sovereignty did not begin till 1402, and it was the end of the century before all the islands became subject to the crown of Castile. This prolonged warfare was due to the very brave resistance offered by the original inhabitants, known as Guanches. These very interesting people, who are of Berber extraction, withstood the Spaniards till 1483, and the name of Grand Canary is said to have been obtained from their stubborn defence. The final defeat of the natives was largely due to the terror inspired by their first sight of a body of cavalry which the Spaniards had landed on the island. The Guanches of Teneriffe held out till 1496. The Canaries were thus subdued just in time to become a stepping-stone to the New World. The horses of the cavalry were carried to America, and formed part of the stock from which sprang the wild American mustang.

On quitting Madeira we caught the north-east trade wind at once, and had a capital run to the Grand Canary, doing the 197 miles in 51½ hours.

The aspect of our new harbour, Puerto de la Luz by name, was somewhat depressing. On its south side is the mainland of the island, which consists of sandhills, behind which are bleak, arid-looking mountains, whose summits during the whole of our three weeks' stay were continuously veiled in mist. The west side is formed by the promontory of Isleta, which would be an island save that it is connected with Grand Canary by a sand isthmus washed up by the sea, much after the manner that Gibraltar is united to the Spanish mainland. The remainder of the protection for the harbour consists of artificial breakwaters. The only spot on which the eye rests with pleasure is a distant view of a cluster of houses, above which rises a cathedral; this is the capital, Las Palmas, which lies two or three miles to the south. The effect made on the newcomer, especially after leaving luxuriant Madeira, is that of having been transported into the heart of Africa.

The port, if not attractive, is at any rate prosperous. The Canaries are still a stepping-stone to the New World, and in accordance with modern requirements have turned into a great coaling station. In Puerto de la Luz six or seven different firms compete for the work. The British Consul, Major Swanston, gave us a most interesting account of his duties during the

South African War in revictualling the transports which called here. Mention should not be omitted of the delightful new institute of the British and Foreign Sailors' Society, with billiard-room, reading-room, and arranged concerts, to which our men were very glad to resort; but indeed we met similar kind provision in so many ports that it seems invidious to particularise.

This was my first experience of life in a foreign port as "stewardess," for our stay at Madeira was only an interlude. To passengers on a mail steamer the time so spent is generally concerned with changing into shore clothes, and making up parties for dinner on land to avoid the exigencies of coaling. To those in charge of a small boat its aspect is very different. Much of it is not a time of leisure, but to be an acting member of a British ship in a foreign port is distinctly exhilarating. It brings with it a sense both of being a humble representative of one's own nationality, and also of belonging to the great busy fraternity of the sea. First, as land is approached, comes the running up of the ensign and burgee; then the making of the ship's number, as the signal station is passed, which will in due course be reported to Lloyds; next follows the entry into port, and the awaiting of the harbour-master, on whose fiat it hangs where the vessel shall take up her berth. He is succeeded by doctor and customs officer to examine the ship's papers; and all these are matters not for some mysterious personages with gold braid, but of personal interest.

As soon as the yacht is safely berthed the Master goes on shore to visit the consul, and obtain the longed-for letters and newspapers. In the food department the important question of food at once arises. My hope had always been that we should have found a steward capable of taking over this responsibility, but though we had various changes, and paid the highest wages, we were never able to get one sufficiently reliable, and the work therefore fell on the Stewardess. We at first used to go on shore and cater personally, which is no doubt the most satisfactory method, but in view of the time involved we subsequently relied on the "ships' chandlers," who are universal providers, to be found in all ports of any size, and who will bring fresh stores to the ship daily. A very careful examination and comparison of prices is necessary, for one of the annoying parts

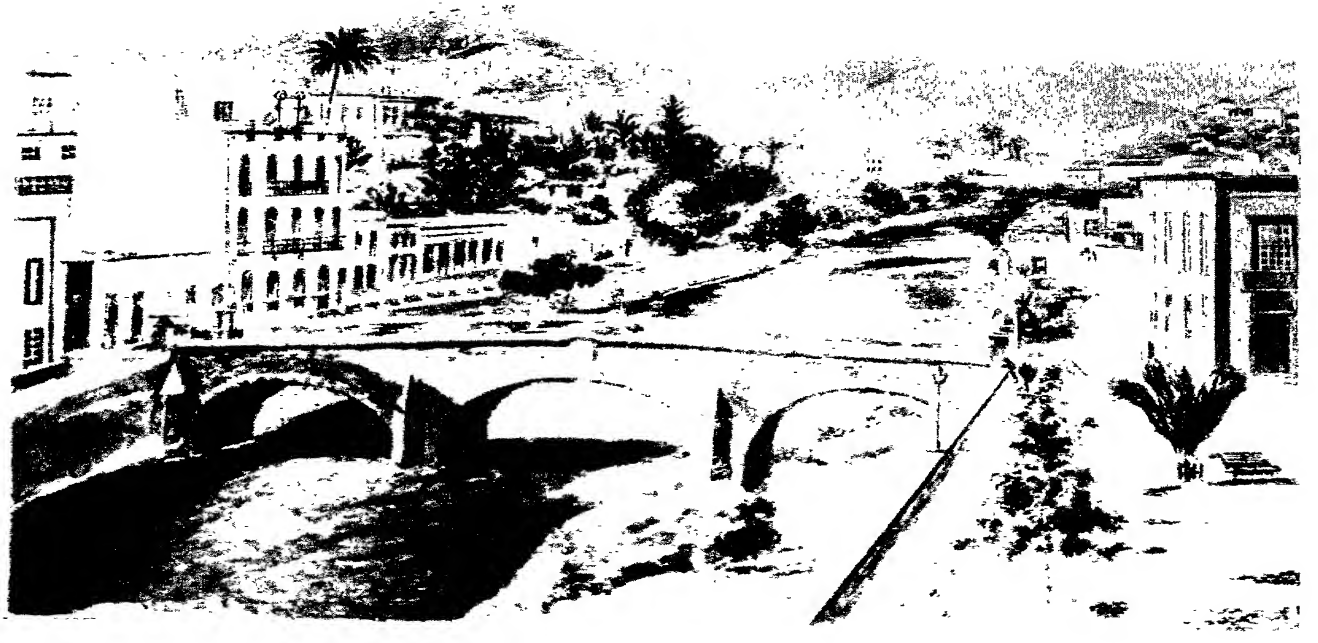
of owning a boat is that even the smallest yacht-owner is considered fair game for extortion and dishonest dealing. The variation in the cost of commodities in different harbours, requires a very elastic mind on the part of the housekeeper, both as to menus in port and purchases for the next stage of the voyage. It puts an extremely practical interest into the list of exports, which formed so dreary a part of geography as taught in one's own childhood. At Las Palmas prices were much as in pre-war England; at our next port, in Cape Verde Islands, the best meat was sixpence a pound, and fish sufficient for four cost threepence, but the cost of bread was high. At Rio de Janeiro and elsewhere in South America, though most things were ruinous, we obtained enough coffee at very reasonable prices to carry us home; while in Buenos Aires, with mutton at fourpence a pound, it was a matter of regret that the hold was not twice as large.

On arriving in port after a long voyage, work is generally needed on the vessel or her engines: if so, the name of the right firm has to be obtained, the firm found, an estimate obtained and bargain made. Then the work has to be done and frequently redone, all of which causes delay it seems impossible to avoid; a fortnight may thus easily be spent in getting a two days' job accomplished. In Las Palmas we were fortunate in finding a capable firm, who took in hand such alterations as our experience in the Bay had shown to be necessary. The offending skylights were fastened down, and ventilating shafts substituted, with the result that we had no more trouble. We had a good deal of extra work on board to do ourselves from a tiresome mishap. In inspecting the stove connected with the heating apparatus, it was noticed that there was water under the grating; this was at first thought to be due to skylight drip, but on lifting the grating there was seen to be quite deep water in the hold almost up to the outside sea-level. The pumps were at once rigged to get it down, but it was found still to be filling; and it was then discovered that there was a serious leakage, due to the fact that the pipe through which the water came to cool the engine had been defectively jointed. It meant days of work to go through the stores affected. Happily nothing was lost except about twenty pounds of tea, and some sweets intended for gifts; but if the accident, which

was entirely due to careless workmanship, had happened at sea the results might have been disastrous.

We were glad when we were at last able to see something of the country. If the harbour of Luz is not beautiful, the road from it into Las Palmas is still less so. It runs between the sea and arid sandhills, and abounds in ruts and dust; as there is also no street lighting, "the rates," as S. remarked, "can hardly be high." Half-way along this road there stand, for no very obvious reason, the English Church and Club, also a good hotel, the Santa Catalina, belonging to a steamship company; otherwise it is bordered by poor and unattractive houses of stucco, the inhabitants of which seem permanently seated at the windows to watch the passers-by. Happily the distance is traversed by means of trams, owned by a company with English capital, which run frequently between the port and the city and do the journey in twenty minutes.

Las Palmas itself is not unpicturesque. Its main feature is a stony river-bed, which runs down the centre of the city and is spanned by various bridges; it was empty when we saw it, but is no doubt at times, even in this waterless land, filled with a raging, boiling current from the mountains. In the principal square, opposite the cathedral, is the museum, which contains an admirable anthropological collection, concerned mostly with relics of the Guanches. When we were there the city was gay with bunting and grand stands for a *fiesta*, in celebration of the anniversary of the union of the islands with the crown of Castile; a flying man, a carnival, and an outdoor cinema entertainment were among the chief excitements. At one of the hotels we discussed politics with the waiter, who was a native of the island. He had been in England, but never in Spain; nevertheless, he seemed in touch with the situation in the ruling country. There would, he declared, be great changes in Spain in the next fifteen years. The King did his best in difficult circumstances, but anti-clerical feeling was too strong to allow of the continuation of the present state of things. In Grand Canary there was, he said, the same feeling as in Spain against the constant exactions of the Church. The women were still devout, but you might go into any village and talk against the Church and meet with sympathy from the men. He himself was a socialist, and as such "had no country; countries were



LAS PALMAS, GRAND CANARY.

From a photo

for rich people who had something belonging to them, something to lose; for those who had to work all countries were the same." He only lived in Canary, he said, because his people were there. We pointed out that the bond with one's own people was precisely what made one country home and not another, but the argument fell flat.

The great charm of the island lies in the mountainous character of the interior region. Three roads radiate from the capital, one along the coast to the north, another to the south, and the third inland. Along all these it is necessary to travel some distance before points of interest are reached, and we were at the disadvantage of never being able to be more than a night or two away from the ship without returning to see how the work on board was progressing. On all the main routes are run motor-buses, which are chiefly characterised by indications of impending dissolution, and inspire awe by the rapidity with which they turn corners without any preliminary easing down. The natives, however, appeared to think that the accidents were not unreasonably numerous.

In addition to motors there are local "coaches" drawn by horses, after the manner of covered wagonettes; they will no doubt be gradually superseded by the motors, but still command considerable custom. Both types of vehicles are delightfully vague in the hours which they keep, being just as likely to start too soon as too late, thus presupposing an indefinite amount of time for the passengers to spend at the starting-place.

Our first expedition was by the inland or middle road, which winds up by the bleak hillside till it reaches a beautiful and attractive country. To those unaccustomed to such latitudes, it comes as a surprise to see fertility increasing instead of diminishing with elevation, due to the more constant rain among the hills. Monte and Santa Brigida may be said to be residential neighbourhoods and have comfortable hotels and boarding-houses. There are two principal sights to be visited from there. One is the village of Atalaya, which consists of a zone of cave dwellings, almost encircling the summit of a dome-shaped hill. The eminence falls away on two sides to a deep ravine, over which it commands magnificent views, and is connected with the adjacent hills by a narrow coll. The rock

is of consolidated volcanic tuff, in which the dwellings are excavated. The fronts of the houses abut on the pathway, which is about four feet wide, and are unequally placed, following the contour of the ground. Each dwelling consists of two apartments, both about twelve feet square, with rounded angles and a domed roof, the surface of the walls shows the chisel-marks. The front apartment is used as a bed-sitting-room, the back one as a store; and in some cases a lean-to out-house has been built of blocks of the same material, in which cooking is done and the goats kept. Doors and window-sashes are inserted into the solid stone. Both dwellings and surroundings are beautifully clean and neat; the first one exhibited we imagined to be a "show" apartment, till others proved equally neat and orderly. Flowers were planted in crannies of the rock and around the doors and windows, being carefully tended and watered. The industry of the village is making pots by hand without a wheel, the sand being obtained in one direction and the clay in another: the shapes coincide in several instances with those taken from native burial-grounds and now to be seen in the museum at Las Palmas. The occasion of our visit was unfortunately a *fiesta*, and regular work was not going on: an old lady, however, made us a model pot in a few minutes; it was fashioned out of one piece of clay, with the addition of a little extra material if necessary: the pottery is unglazed. Various specimens of the art were obtained by the Expedition and are now in the Pitt-Rivers Museum at Oxford.

About half a mile from these troglodyte abodes, and adjoining the coll, is an extraordinarily fine specimen of an extinct crater or *caldero*. Its walls are almost vertical and unclad by vegetation: about two-thirds of the circumference is igneous rock, and the rest black volcanic ash, which exhibits the stratification in the most marked manner. The crater is about 1,000 feet deep, the floor is flat and dry, and the visitor looks down on a house at the bottom and cultivated fields.

We returned to *Mana* for a night or two, and then made an expedition by motor along the north road, sleeping at the picturesque village of Fergas, and from thence by mule over the beautiful mountain-track to Santa Brigida. We changed animals *en route*, and the price asked for a fresh beast was

outrageous. We were prepared under the circumstances to pay it, when the portly lady of the inn, who was obviously "a character," beckoned us mysteriously round a corner, and, though we had scarcely two words of any language in common, gave us emphatically to understand that we were on no account to be so swindled, she would see we got another. This, however, was not accomplished for another hour, with the result that the last part of the journey was traversed in total darkness, and the lights of the hotel were very welcome.

Mana being still in the hands of work-people, we made our next way by the south road to the town of Telde, near which is a mountain known as Montana de las Cuatro Puertas, where are a wonderful series of caves connected with the Guanches. The road from Las Palmas skirts the sea-coast for a large part of the way, being frequently cut into the cliff-face and in one place passing through a tunnel: the town lies on the lowland not far from the sea. We arrived late in the afternoon, and endeavoured to make a bargain for rooms with the burly landlord of the rather humble little inn. As difficulties supervened a man who spoke a little English was called in to act as interpreter. He turned out to be a vendor of ice-creams who had visited London, and to make the acquaintance of the exponent of such a trade in his native surroundings was naturally a most thrilling experience. He expressed a great desire to return to that land of wealth, England, though his knowledge of our language was so extremely limited he had obviously, when there, associated principally with his own countrymen.

We went for a stroll before dark, noticing the system of irrigation: the water is preserved in large tanks, from which it is distributed in all directions by small channels, and so valuable is it that these conduits are in many cases made of stone faced with Portland cement. They are now, however, in some instances being replaced by iron pipes, which have naturally the merit of saving loss by evaporation. Canary is a land where the owner of a spring has literally a gold-mine. This is the most celebrated district for oranges. After our evening meal we joined the company in the central *plaza* of the little town. The moon shone down through the trees; young men sat and smoked, and young girls, wearing white mantillas, strolled about in companies of four or five, chatting gaily. The

elders belonged to the village club, which opened on to the square; it was confined seemingly to one room, of which the whole space was occupied by a billiard-table; this, however, was immaterial, as the company spent a large part of the time in the *plaza*, an arrangement which doubtless had the merit of saving house rent. A little way down a side street the light streamed from the inn windows. Nearer at hand the church stood out against the sky; it was May, the month of the Virgin Mary, and a special service in her honour had just concluded. One felt a momentary expectation that Faust and Marguérite or other friends from stage-land would appear on the scene; they may of course have been there unrecognised by us.

We discovered after much trouble that a motor-bus ran through the village early next morning, passing close to the mountain which we had come to visit, and could drop us on the way. We passed a fairly comfortable night, though not undiversified by suspicions that our beds were occupied by earlier denizens; and had just begun breakfast when the bus appeared, some time before the earliest hour specified. We had to tear down and catch it, leaving the meal barely tasted; the kind attendant following us and pressing into our hand the deserted fried fish done up in a piece of newspaper. Such hurry, however, proved to be quite unnecessary, as we had not got beyond the precincts of the small town before the vehicle came to an unpremeditated stop, through the fan which cools the radiator having broken. We waited half an hour or so in company with our fellow-passengers, who appeared stolidly resigned, and then, as there seemed no obvious prospect of continuing our journey, grew restless. Here again the ice-cream man acted as *deus ex machina*: he was standing about with the crowd which had assembled, blowing a horn at intervals, and distributing ices not infrequently to small infants, whose fond mammas provided the requisite penny; he told us he generally made a sum equal to about one-and-sixpence a day in this manner. Grasping our difficulty, he delivered an impassioned address on our need to the assembled multitude, which after further delay resulted in the appearance of a wagonette and mules. The Montana de las Cuatro Puertas rises out of comparatively level ground near the coast and commands magnificent views. The top is honeycombed with caves, and one towards the north has the four

FIG. 4.

PORTO GRANDE, ST. VINCENT, CAPE VERDE ISLANDS.

entrances from which the mountain takes its name. It is said to have been the site of funeral rites of the inhabitants. The place is both impressive and interesting, and would well repay more careful study than the superficial view which was all it was possible for us to give it.

We decided to return to Las Palmas in the local coach, as we had previously found travelling by this means both cheap and quite comfortable. This time, however, our luck was otherwise. The vehicle could have reasonably held eleven, but one passenger after another joined it along the route, one newcomer was constrained to find a seat on the pole, another stood on the step, and so forth, till we numbered twenty, of all ages and sexes. The day was hot, but the good-natured greeting, almost welcome, which was given to each arrival by the original passengers made us hesitate to show the feelings which consumed us. The sentiments of the horses are not recorded, but we gathered that they were more analogous to our own.

All on *Mana* was at length ready. There were the usual good-byes and parting duties: the bank had to be visited, all bills settled, and letters posted. Last of all a bill of health had to be obtained from the representative of the country to which the ship was bound, certifying that she came from a clean port and that all on board were well.

CAPE VERDE ISLANDS

The Cape Verde Islands are a collection of volcanic rocks, rising out of the Atlantic, some 500 miles from the African mainland. There are nine islands, with a total population (1911) of 142,000. The group was first discovered by Europeans in 1446, through the agency of one of the expeditions sent out by Prince Henry the Navigator. Unlike the Canaries, the Cape Verde Islands when found were uninhabited; but there were monolithic remains and other traces of earlier visitors, all of which have unfortunately now disappeared. The Portuguese settlers almost immediately imported negro labour, and the present population is a mixed race. For a long time the Leeward Islands, or southern portion of the group, attracted the most attention, and one of them, St. Jago by name, is still the seat of government. St. Vincent, however, which belongs to the Windward or northern section, and was at one time a convict settlement, is now the more important from a commercial point of view, as its magnificent harbour, Porto Grande, forms a coaling station for steamers bound to South America The British consul removed there from St. Jago during the middle of last century. It is also the centre for the East and West Cable Company.

The next stage of our outward voyage the conditions were again pleasant and satisfactory.

We left Las Palmas on Saturday, May 10th: the trade wind was still with us, the weather delightful, and we did the distance to St. Vincent, Cape Verde Islands, in seven days. We had heard nothing but evil of it. "An impossible place;" "another Aden;" "a mere cinder-heap." It was therefore a pleasant surprise to find ourselves in a most beautiful harbour. Rugged mountains of imposing height rise on three sides of the bay, Porto Grande, and the fourth is protected by the long high coast-line of the neighbouring island, San Antonio. Standing out in the entrance of the bay is the conical Birds' Rock, looking as if designed by nature for the lighthouse it carries. The colouring is indescribable: all the nearer mountains are what can only be termed a glowing red, which, as distance increases, softens into heliotrope. On the edge of the bay and at the foot of the eastern hills lies the town of Mindello. A building law, made with the object of avoiding glare, forbids any house to be painted white, and the resulting colour-washes, red, yellow, and blue, if sometimes a little crude, tone on the whole well into the landscape.

If beauty of form and strange weird colouring are the first things which strike the newcomer to St. Vincent, the next, it must be admitted, is the marvellous bleakness of the place. Hillsides and mountains stand out bare and rugged, without showing, on a cursory inspection at any rate, the least sign of vegetation. One of the characteristics also of the place is the constant tearing wind. During the whole of our visit of some ten days we were never able to find a day when it was calm enough for Mrs. Taylor, the wife of the British Consul, to face the short passage from the harbour and visit *Mana*. This wind is purely local and a short distance off dies away. How, one is inclined to ask, can it be possible for English men and women to endure life in a tropical glare, with a perpetual wind without any trees, any grass, any green on which to rest the eye? And yet we found over and over again that, though the comer from greener worlds is at first unhappy and restless in St. Vincent, those who had been there some time found life pleasant and enjoyable and had no desire to exchange it.

There are several coaling and other English firms, and local

society rejoices in as many as thirty English ladies. The cable company has over a hundred employees, of whom the greater number are English. The unmarried members of the staff live together in the station, each having a bed-sitting-room and dining in a common hall. There is an English chaplain, and also a Baptist minister, who is the proprietor of the principal shop. The chaplain had the experience, which everyone must have felt would happen some time to someone, of being carried off involuntarily on an ocean-going steamer. He was saying good-bye to friends, missed the warning bell, and before he knew was *en route* for a port in South America, to which he had duly to proceed. For recreation St. Vincent possesses a tennis-court and cricket-field: the last is in a particularly arid spot some distance from the town, which is however already planned out on paper by the authorities with streets and houses for prospective needs; in the design the pitch is left vacant and named in Portuguese "Game of Cricket," the remainder of the field being filled in anticipation with a grove of trees.

Some of the residents have villas among the hills or by one of the scarce oases. We made an excursion to one of these last resorts which is a famed beauty-spot, and found it a narrow gulch between two mountains, with a little stream and a few unhappy vegetables and woebegone trees. It was difficult to imagine, while traversing the road along one hillside after another, each covered with nothing but rocks and rubble, on what the few animals subsisted; it was remarked that the milk could not need sterilising, as the cows fed only on stones. The rains occur in August, after which the hills are covered with a small green plant. We were told that some of the valleys higher up are comparatively fruitful, and certainly it is possible to obtain vegetables at a not unreasonable price. The women who live in the hills carry back quite usually, after a shopping expedition, loads of seventy to eighty pounds for a distance of perhaps three miles, with a rise of 900 feet, making the whole journey in two and a half hours.

The British Consul, Captain Taylor, R.N., has with much enterprise established a body of Boy Scouts among the youthful inhabitants. An attractive member of the corps, wearing a becoming and sensible uniform, accompanied us as guide on two occasions, when we made excursions on the island, giving the

whole afternoon to us. He declined to accept any remuneration, as it was against the principles of his order to be paid for doing a good turn. Other youthful natives are less useful and more grasping. One small imp, with a swarthy complexion and head like an overgrown radish, became our constant follower. The acquaintance began one day when S. was carrying a large biscuit-tin from the post office, in which some goods had just arrived from England: he followed him down the pier, beseeching, "Oh, Captain Biscuit-Tin, give me one penny." Every time after this, when S. went on shore for business or pleasure, "Biscuit-Tin," as we in our turn named the boy, was there awaiting him. Once, in stepping out of the boat on to the rusty iron ladder of the jetty, his toe almost caught on a small round head as it emerged from the water uttering the cry, "Oh, Captain, where is that penny?" A crowd had surrounded the landing-stage, so the boy had dived into the water as the easiest way of approach. He expressed the desire to come with us to Buenos Aires, undeterred by the information which S. gravely gave him that "all the boys on board were beaten every day, with an extra beating on Saturday." The avocation which he proposed to fill was that of cook's boy, as he "would have much to eat." He followed us for the whole of one expedition, eventually obtaining "that penny" as we shoved off from the pier for the last time, an hour before sailing. He clapped it into his cheek, as a monkey does a nut, and held out his hand to me for another; but I was already in the boat, and a coin was not forthcoming; so that the last which we saw of "Biscuit-Tin" he was still demanding "one penny."

We brought away from St. Vincent a permanent addition to our party, a Portuguese negro of fine build, by name Bartolomeo Rosa. The rest of the crew accepted his companionship without hesitation and naturally christened him "Tony." Later we found, with sympathy, that he was wearing goloshes, in a temperature when most of the party were only too happy to go shoeless, because Light, who had more particularly taken him under his wing, said "the sight of his black feet puts me off my food." Rosa remained with us to the end of the voyage. He learnt English slowly, and would never have risen to the rank of A.B., but was always quiet, steady, and dependable. He drew but little of his wages, and had therefore a considerable

sum standing to his credit when we returned to Southampton. He proposed, he said, to go back to his old mother at St. Vincent and there set up with his earnings as a trader. He would get a shop, stock it, and marry a wife, and she would attend to the customers, while he would sit outside the door on the head of a barrel and smoke. When it was suggested that such a course would inevitably end in drink, he added a boat to the programme, in which he would sometimes go out and catch fish.

We were detained at St. Vincent awaiting the arrival of a spare piece of machinery, and occupied the time by watering the yacht at the bay of Tarafel in the island of San Antonio. A stream from the high ground there finds its way to the sea, and supplies the water for the town of Mindello. The lower part of its banks are fertile, forming a beautiful, if small, spot of verdure amid the arid surroundings. Light, with the green hills of Devonshire in mind, remarked, "It is very nice, ma'am, what there is of it—only there is so little."

When we brought up, the men went into the shallow water and shot the trammel in order to obtain some fresh fish. This brought on board an elderly gentleman, Señor Martinez, the official in charge of the place, who was not unnaturally indignant at what he imagined to be a foreign fishing vessel at work in territorial waters. We were able to explain matters, and were much interested in making his acquaintance. He had never visited England, but spoke English well, kept it up by means of magazines, and was greatly delighted with the gift of some literature. He welcomed us as the first English yacht which had been there since the visit of the *Sunbeam* in 1876, of which he spoke as if it had been yesterday.

Having got our package from England, we finally quitted the friendly harbour of Porto Grande on Thursday afternoon, May 29th, sailing forth once more, this time to cross the Atlantic, with the little shiver and thrill which it still gave some of us when we committed our bodies to the deep for a long and lonely voyage, even with every hope of a resurrection on the other side of the ocean. After we sighted St. Jago, the capital of the Cape Verde group, on the following day, we saw no trace of human life for thirteen days; so that if mischance occurred there was nothing and no one to help in all the blue sea and

sky. The self-sufficiency needed by those who go down to the sea in ships is almost appalling.

Instead of making direct for Pernambuco, we steered first of all due south, carrying with us the north-east trade, in order to cross the Doldrums to the best advantage, and catch the south-east trade as soon as possible on the other side. The calm belt may be expected just north of the Equator, but its position varies with climatic conditions, and it was therefore a matter of excitement to know how long we should keep the wind. In the opinion of our authorities it might leave us on Sunday and could not be with us beyond Tuesday. The engineer, whose duty had so far been light, had been chaffingly warned by the rest of the crew that his turn would come in the tropics, when he would have to work below for twenty-four hours on end.

On Sunday S. gave orders that the engine was to be started by day or night, whenever the officer in command of the watch thought it necessary; but still the north-east trade held good. On Monday all hands were at work stowing the mainsail, for as soon as the calm came the squalls were expected which are typical of that part of the world. On Tuesday evening, when according to calculation we should have been out of its zone, we were still travelling before the wind, and we began to congratulate ourselves with trembling, that our passage would be more rapid than we had ventured to hope. All Wednesday, however, the breeze was very light, and we kept our finger on its pulse as on that of a sick man. By Thursday it had faded and had died away, the sails hung slack, the gear rattled noisily, the motor was run. The air was hot, damp, and sticky, with heavy squalls, and the nights were trying. It is impossible to sleep on the deck of a small sailing ship, with so many strings about and someone always pulling at something, so we roamed from our berths to cabin floors and saloon settees and back again, "seeking rest and finding none." The thermometer in the cabin never throughout the voyage rose to more than eighty-three degrees, but, as is well known, it is humidity and lack of air rather than the absolute height of temperature which determine comfort. Friday afternoon increased air roused our hopes; but, alas! it soon subsided, and during the night we again relied on the engine. Saturday morning was

A GROUP ON DECK.

A. Light; Steward; B. Rosa; Under-Steward; C. Jeffery; W. Marks; F. Preston Mates; H. J. G Bam (Sailing-master).

still squally, with a grey sea and heavy showers, but there was really a slight breeze. Was it or was it not, we asked under our breath, the beginning of the new wind? By ten o'clock there was no longer room for doubt: the south-east trade was blowing strong and full, and the ship, like some living creature suddenly let loose, bounding away before it for very joy. It felt like nothing so much as a wonderful gallop over ridge and furrow after a long and anxious wait at covert-side.

We crossed the Equator in glorious weather about 9 p.m. on Monday, June 9th. None of the forecastle had been over before: Father Neptune did not feel equal to visiting them, but some addition to the fare was much appreciated. I was the doyen of the party, with now seven crossings to my credit. Flying-fish came at times on board from the shoals through which we passed, "Portuguese men-of-war" floated by the ship, and schools of porpoises played about her bows. The wind on the whole stood our friend for the rest of the way, and during the last week of the voyage the average daily run was 147 miles on our course, the highest record being 179 miles on June 14th. We continued, however, to have squalls and rain at intervals, as we were running into the rainy season; and it was through a mist that on Sunday, June 15th, after a passage of seventeen days, we strained our eyes to see the South American coast. It dawned at last on our view, a flat and somewhat low land; then came into sight the towers and coconut palms of Pernambuco, and the passage of the Atlantic was accomplished.

CHAPTER III

BRAZIL

Pernambuco—Bahia—Cabral Bay—Cape Frio—Rio de Janeiro—Porto Bello—A Pampero.

After the discovery of the New World its possession was contested by five sea-going nations of Western Europe—the Spanish, Portuguese, French, English, and Dutch. Of these the Spanish and Portuguese were first in the field, and the Portuguese established themselves in that part of the southern continent now known as Brazil. Their acquisition of this particular territory was largely due to accident: the Portuguese navigator Cabral, sailing in 1500 for the East Indies, via the Cape of Good Hope, shaped his course so far to the west, in order to avoid the calms off the African continent, that he hit off this part of the coast. An important Portuguese settlement grew up on the bay known as Bahia de Todos os Santos (All Saints' Bay). Further south French Huguenots were the first to discover and colonise the bay of Rio de Janeiro, but the Portuguese finally succeeded in expelling them in 1567, when Rio became the capital of the southern portion of their territory, Bahia retaining its pre-eminence in the north.

In the seventeenth century Portugal, and consequently her overseas possessions, fell for a while under the dominion of Spain; with the result that the settlers acquired a new foe in the young power of the Dutch, with whom the Spaniards were at war. The Dutch West India Company was formed with the especial object of capturing Brazil: the first fleet, which sailed in 1623, gained for a time possession of Bahia, and in 1629 the Dutch conquered Olinda and the neighbouring town of Recife, or Pernambuco, where they established themselves under the able leadership of Prince Mauritz of Nassau. In 1640, however, the Portuguese threw off the Spanish yoke, and, as the quarrel of Holland had been with the latter, she allowed herself to be bought out of her conquests in Brazil; an arrangement due in part to the intervention of Charles II of England, who had married a Portuguese princess. There was an old alliance between this country and Portugal, and when in 1739 war broke out between England and Spain, occasioned by the wrongs of a certain Captain Jenkins whose ear the Spaniards had cut off, Commander Anson selected a Brazilian harbour in which to revictual his ships on his way to harry the Spanish in the Pacific.

During the Napoleonic wars the history of Europe again affected Brazil. In 1808, when the French were on the point of entering

Lisbon, the royal family escaped overseas, established their court at Rio de Janeiro, and made Brazil a kingdom. In 1820 King João VI returned to Portugal, leaving his son Pedro in command, and the mother country sought to reduce Brazil once more to the provincial status. This was resisted by the colonists, who had tasted the sweets of authority; they declared themselves independent, and made Pedro, who was personally popular, into Emperor of Brazil. Pedro was succeeded by his son, who reigned till 1889; in that year a revolution occurred, due partly to defects of government, partly to the discontent caused by the emancipation of the slaves. Pedro II left for Europe, and Brazil was declared a republic.

PERNAMBUCO, or Recife, has been built on low land at the junction of two rivers, and has the advantage of a good harbour, protected by a natural reef, which has been improved by artificial means. The town has grandiosely, but not altogether inaptly, been called a "modern Venice"; the business quarter, or Recife proper, is built on a peninsula formed by one of the rivers, while the windings of the other divide the remaining part of the town into sections, which have to be crossed and recrossed by bridges. Otherwise the place is not attractive, the site has originally been a quagmire, and the roads have been made by merely levelling the ground and covering it with rounded stones; they now consist principally of shallow lakes and crevasses. The streets, with the exception of a few new thoroughfares, are little more than lanes and just wide enough for two vehicles to pass. Most of the traffic is done by mule trams, and any other vehicles, except when they can get on the tram lines, are obliged to move at a snail's pace. It is difficult to understand how the motors contrive to exist, but they are fairly numerous. The houses are of stucco and outrival those of St. Vincent in brilliancy of colouring. The authorities at the time of our visit had been seized with the laudable desire to reconstruct the town on a large and ambitious plan, the object being to rival the larger towns further south, and, in view of their growing prosperity, to keep a place also in the sun for Pernambuco. This form of civic patriotism plays a noticeable and unexpected part in various South American towns. The result at the moment was to make the place appear, in certain districts, as if it had suffered by fire or bombardment.

It is impossible not to be struck when walking the streets with the great varieties of type, and consequently of colouring, among the populace The original races have been the native

Indian, the European who conquered the land, and the Negro imported for his services, and there are now, in addition to their pure-blooded descendants, every shade and mixture of the three. The colour of a man's skin is however of little or no social concern, and there is an absence of race prejudice which to the Anglo-Saxon mind is very astonishing. We had the pleasure of visiting the opera on a gala night at the kind invitation of the British Consul and his sister, Mr. and Miss Dickie, and saw much mixture of colouring among the upper classes. The subject of the opera was romantic and dealt with the early Portuguese era, the heroine being carried off by Indian raiders. Women of all shades have a very proper idea of the consideration due to them, though there would seem to be no reason even to the most advanced of us why, as was said to be the case, a negress should consider it beneath her dignity to carry a message across the road.

The political situation is apparently liable to surprises. At the principal music-hall, just before our visit, an accident occurred to the driving-chain of the electric light, causing a certain amount of clatter; the audience immediately sprang to their feet, the women shrieked, and there was a general stampede. It had been immediately concluded that the noise was caused by pistol shots and heralded a revolution.

The economic standing of Pernambuco and the why and wherefore of its existence are a puzzle to the stranger. There is no appearance of any considerable quantity of trade or wealth, indeed, to judge by the notices displayed, the inhabitants live principally on mutual doctoring and pulling out each other's teeth. The cost of living is nevertheless very high, owing largely to the fact that everything seems to be brought from overseas. Stone for building is conveyed all the way from Northern Europe, and a Norwegian barque, which lay beside us, was busy unloading timber at the door of the forests of Brazil. Even the common articles in use are brought from the Old World, and the tables of the restaurants are crowded with imported products, in spite of almost prohibitive tariffs, which raise the price of a ham, for example, to four or five times its original value. In addition special prices are at times reserved for strangers: the yacht's steward was allowed to depart without purchasing a packet of cigarettes for which eightpence was

asked; Rosa, with his dark skin, got the identical article for a penny.

We followed one of the rivers in the launch almost as far as it is navigable, a distance of some nine miles. The banks are low, and were at first covered with mangrove; later the land was cultivated after a fashion, and there were a certain number of country houses, but in a state of dilapidation and decay.

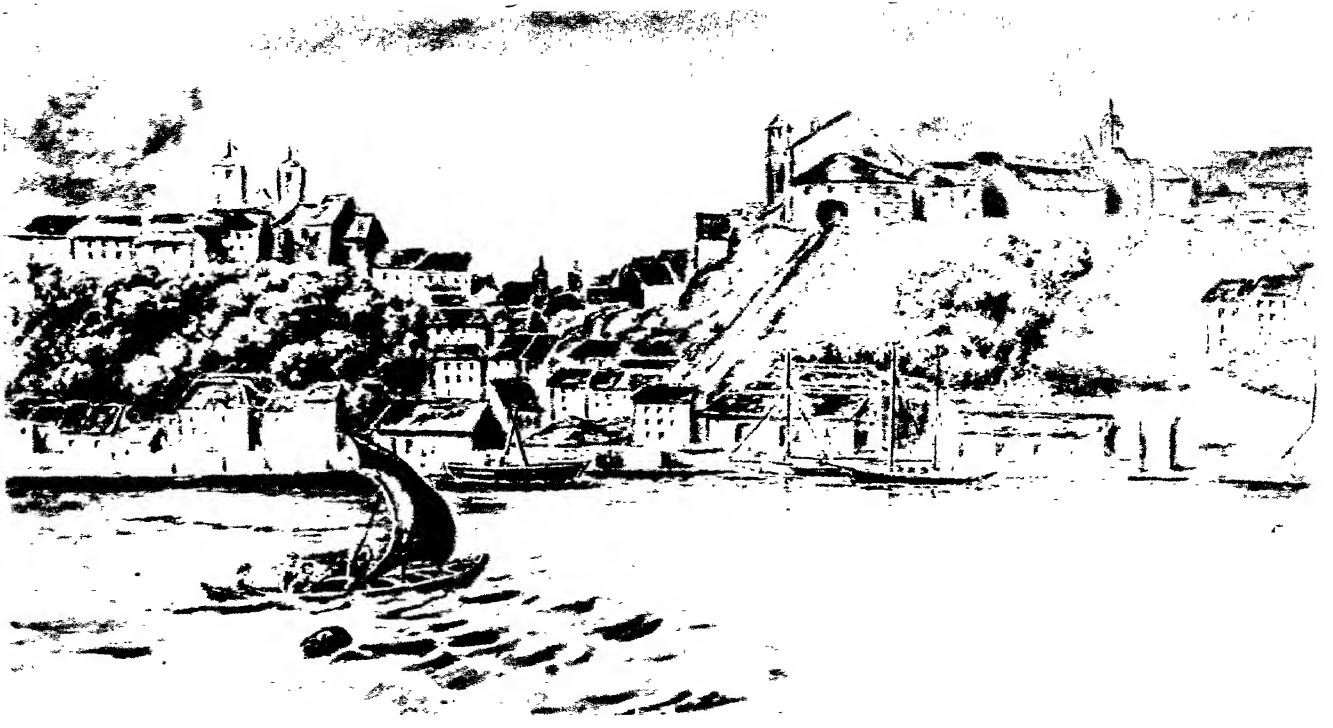
Anyone who wishes to leave the prosaic present and be transported back to the old times of colonisation should visit Olinda, the ancient seat of government, which lies three miles to the north of Pernambuco. The remains of it to-day are a little group of houses standing picturesquely on a wooded promontory, which rises high above the low-lying coast. The old street, winding up to the top of the semi-deserted city, along which must have passed gay cavalcades, sober monks, and captured Indians, is still the high way, but it is now carpeted with grass, kept short, not by traffic, but by the sheep which browse upon it. From the highest point, the view extends in one direction to the sea and in the other to the forests of the interior. The most arresting feature is the number of churches and religious houses: everywhere the eye turns these great buildings rise among the luxuriant foliage, from one standpoint we counted ten such edifices. Some are deserted; some are still inhabited. The Franciscan establishment, where a fraternity still occupy the conventual buildings, is said to have been the first of its kind in Brazil, but we could arrive at nothing more definite as to date from the brother who acted as guide than that the place was "three hundred years old." The church contained some particularly good Dutch tiles representing scenes from the life of the Virgin and St. Anne; similar ones are to be seen in the cathedral, which was undergoing repair, and where no means were being taken to preserve them from injury at the hands of the workmen. These edifices were presumably rebuilt after the capture of the place by the Dutch; for Olinda is said to have been so utterly destroyed by the fighting, of which it was the centre, that Prince Maurice of Nassau gave his attention instead to the improvement of Recife.

Our regrets at leaving Pernambuco on Saturday, June 21st, after a stay of six days, were mitigated by the heat of the docks and by the fact that for some nights the mosquitoes had been

unceasingly active. As soon as we left S. started an exterminating campaign, and killed sixty straight away in his own cabin and the saloon. For weeks afterwards, Mr. Gillam could be seen daily going on his rounds with a bottle of quinine tabloids, the lambs obediently swallowing the same. His medicinal doses were under all circumstances magnificently heroic, some of his remedies being kept in quart bottles, on the principle, as he explained, that it was "no use spoiling the ship for a halfpenny-worth of tar." It was doubtful in this case if the enemy were really of the malaria-carrying type; they did not appear to stand on their heads in the correct manner—anyway, we all escaped contagion with one slight exception, though I myself had had a bad attack shortly before leaving England, brought on by influenza, after six years' complete immunity.

We had now before us a voyage of some 3,000 miles down the eastern coast of South America before the Magellan Straits were reached. It was marvellously impressive sailing day after day along the coast-line of a great continent, although at the moment the said coast was sandy and flat, the only diversity being occasional lights at night from some town on the shore. Bahia de Todos os Santos, more generally known simply as Bahia, was our next destination. Some fine Portuguese houses are said to survive from the days when it was the old capital, and it may be remembered as the locality where Robinson Crusoe was engaged in planting tobacco, when he was induced to go on the slave-raiding voyage which led to his best-known adventure. The bay, which runs north and south, extends for twenty-five miles, and the situation of the town on its east side is distinctly fine; part of it has been built on the shore, and part on the top of rising ground immediately above it. The funicular railway which connects the one with the other is to be seen from the sea.

This unfortunately is all that circumstances allow us to record. The anchor was dropped at midday, Wednesday, June 25th, and orders given for luncheon to be served at once, so that we might go on shore as soon as we had got our pratique. The health officer, when he came on board, was found to speak nothing but Portuguese, which made communication difficult; the same had been the case with the pilot at Pernambuco; and as half the vessels visiting those ports are English it might per-



BAHIA DE TODOS OS SANTOS.

haps be suggested, without insular pride, that a smattering of that language, or at least of French, might be desirable in such officials. We produced the bill of health from Pernambuco in ordinary course: this, however, did not satisfy the doctor. He asked for that from St. Vincent, then from Las Palmas, and finally from Falmouth, though we pointed out that, as this had been granted three months ago, it scarcely had a practical bearing on the case: the virgin health of Bahia must, we felt, indeed be immaculate to require such protection. Finally the bill was stamped and passed. Then the officer handed in a marvellous paper of directions given in English, which stated that "if the captain went on shore all boats' crews were to return immediately to the ship; that no one was to be on shore after 7 p.m.; no fruit was to be bought from hucksters, and none was to be eaten till it had been in a cool place for three days."

We felt that it had become our turn to inquire after the health of Bahia, and it was reluctantly admitted that yellow fever was raging. Upon hearing this we metaphorically gathered our skirts around us, and, although greatly disappointed to miss seeing the town, naturally decided that we would not land. A quaint position then arose, as the doctor, with an eye probably to the fee involved, stated that the ship could not leave unless S. went on shore and obtained a new bill of health, a proceeding at which, as may be supposed, he drew the line. As the official had no means of enforcing authority, victory remained with *Mana*, but even so we were left wondering whether the stain on our moral character of the Bahia endorsement of our certificate would secure us quarantine at our next port. We spent the night in the bay some distance from shore, in order that Mr. Ritchie might test the compass by swinging the vessel.

After we left Bahia the coast-line was at times broken by islands, and varied inland by hills which rose behind wooded banks and sandy shores. We had plenty of time to make notes of any features of interest, for the landmarks on the shore became quite old friends before we parted company. The weather became cooler, the cabin thermometer ranging from 75° to 80° but we met with an unexpected and persistent head wind; long tacks seemed to bring us but little forward, and *Mana* presented the pathetic spectacle of a good ship struggling against adversity The log day after day gave the depressing chronicle of only

some twenty to thirty miles of progress, and the 700 miles to Rio de Janeiro began to appear interminable. After some five days of this weary work, making eleven since we had left Pernambuco, S. decided that it would be in the interests of all to obtain a change by making the shore along which we were sailing. He therefore, after careful study of the sailing directions, selected a spot where health officers would not be found—Cabral Bay. Our Navigator thought the entrance somewhat risky, and requested written orders before going in: as, however, rashness is not one of my husband's sins I awaited the result with equanimity. It is the small bay where Cabral landed on April 24th, 1500, two days after discovering the continent. He erected a cross on the site of the present village, took possession of the land for the King of Portugal, and christened it Santa Cruz, a name which was changed in the middle of the sixteenth century to Brazil, from *brasa*, the term applied by the Portuguese to the brilliant red wood of its forests. The village and northern part of the bay continue, however, to bear the name of Santa Cruz, while the southern portion is called after the great navigator.

The land which forms the bay consists of a low ridge, two miles or so in length, covered with brushwood and undergrowth; it is arrested suddenly to the north by the course of a river, which has here made a passage to the ocean, and ends abruptly in a steep white cliff. Between the cliff and the river nestles the small village of Santa Cruz, and on the height stands a church which forms the landmark for ships entering the bay. Up the hillside winds a little white path where the grass has been worn away by the feet of worshippers ascending to the house of prayer. At its southern end the ridge dies gradually away in a little promontory, on which stands a tall cross of wood with an inscription stating that it was erected by the Capuchins on the date 22.3.98, but whether that was yesterday, or one hundred, or two or three hundred years ago, there was nothing to show. In front of the bay is a coral reef, so that only baby waves break over the sandy beach, and hard by the cross is a stream, with low reaches and dark shady pools overhung by mangroves.

Here we spent two days, watered the ship from the stream, bathed, fished, and revelled in the wind and sunshine, feeling like prehistoric men, and at one with all creation, from amœbas

to angels. The men from the village, dark and lithe, came to visit us in dug-out canoes, hollowed in true Robinson Crusoe fashion from the trunks of trees, and lent us a hand in our work, after which we had out the launch and gave them a tow back to the village. There we found the kindest welcome and walked up the little white path to the church. It was tattered and dirty; but old women with interesting faces, who came in to see the strangers, knelt devoutly at the altar-rails before putting out a hand to greet us. When we departed the inhabitants came to the river-side, where also stands a cross, though whether it is that erected by Cabral or not this history cannot say; they gave us presents, fired rockets, and waved us adieu to the last. Life might be hard at Santa Cruz, but at least it seemed quiet and peaceful. As *Mana* went out of the bay there was a stormy sunset over the church and a wonderful rainbow in the east; gradually the cross on the promontory faded away, the breaking waves on the coral reef could no longer be heard, and so, as John Bunyan would say, "we went on our way."

On leaving Cabral Bay we stood out to sea as the best chance of obtaining a fair wind, and the weather gradually became more favourable. One particularly clear evening, July 8th, at sunset, we were able to see a peak on the mainland which is just under 7,000 feet in height at a distance of ninety-six miles. Altogether it was a pleasant run, occupied by the Stewardess in reading geology and darning stockings. We had not been able completely to fill our water-tanks at Santa Cruz, and it was now decided to procure the remainder at Cape Frio, which was seventy miles this side of Rio de Janeiro, rather than risk the quality which might be obtainable in the city. As we returned to the coast we found that its low character had given way to a region of hills, cliffs, and islands. Cape Frio itself is a bold rocky promontory, or rather island, for it is separated from the mainland by a narrow passage, and shelters behind it a romantic basin consisting of a series of small coves. In places the surrounding mountains recede sufficiently to allow of little sandy beaches, elsewhere sheer cliffs covered with verdure come down to the margin, and trees and ferns overhang the water. We entered by moonlight, and the dark shadows and sparkling sand made a striking and effective contrast.

In one cove is a fishing village, with a church and small store.

Here for the first time oranges were valued as a native product, so far they had been no cheaper than in England, and at threepence a dozen the forecastle and midships bought them by the bathful. The facilities for obtaining water next day proved not so good as had been hoped. I left S. superintending the crew, as they staggered through the surf to the cutter with bags of water from the village well, and ascended 300 or 400 feet to a signal station on the landward side of the gorge which cuts off the outlying island. This commanded a magnificent view of a wide stretch of blue Atlantic and the adjacent coast; in the direction of Rio was a panorama of low lands and lagoons, bordered by ranges of rugged mountains which rose tier upon tier as far as the eye could reach. On the way down I gathered a spray of bougainvillea from a shrub in full bloom.

S. had meanwhile made acquaintance with the storekeeper and general village factotum, who we had already found, to our surprise, spoke English well. He turned out, as might have been expected, to be a German. The history of his life would probably be interesting. His experiences included at any rate residence at Bonn University and the post of steward on the yacht of the late Mr. Pierpont Morgan, but who or what had brought him to this spot did not transpire. He had at one time become naturalised as a citizen of Brazil, but had subsequently laid down his rights, preferring to keep out of public concerns, for, as he naïvely remarked, "they never talk politics here without killing a man."

The lore of Frio was as romantic as its appearance, and worthy of the pen of Stevenson. Not only have traces come to light on a neighbouring promontory of Indian burials consisting of bones and pottery, but more valuable treasure finds were of not infrequent occurrence; buried Spanish coins turned up at intervals, and an ingot of silver had lately been discovered. There was no doubt, in the opinion of the storekeeper, that considerable treasure was hidden among the islands along the coast, but hunting for it was forbidden by the government. Not far from the village itself there was a cave, which was obviously the work of man, and said to connect two coves, but no one dared to explore it. Nothing was known of its history, but, according to tradition, it was the work of the Jesuits: why a religious order should have made such a resort our informant was unable

to explain, but he evidently considered that it would be quite in accord with their usual underground and mysterious methods of procedure. Thirty years ago he himself, with the owner of the cave and one other, had taken up a barrel of wine and had a drinking bout at its entrance, a scene which some old painter of the Dutch school would surely have found congenial: he had then penetrated some twenty or thirty yards into the interior; it was at first, he said, narrow, then became wider, but since that time no one had entered it.

S. was naturally fired with a desire to explore this hidden cavern; Mr. Gillam responded to the call for an assistant, and they set out for the place, accompanied by our informant. There proved to be some difficulty in discovering it, even with his assistance, owing to the dense vegetation which had arisen since it was last visited. Mr. Gillam's thoughts not unnaturally turned to snakes, and the information given in reply to a question on the subject lacked something in reassurance: there were a great many about, it was said, and of a dangerous kind, but they only struck when trodden upon, and as it was now getting late in the day it might be hoped that they had retired to their lairs. When the cave was at length found, bushes and undergrowth had to be cut down in order to effect an entrance, and a cloud of bats flew out of the darkness within. The walls were examined by the light of a ship's signalling lantern, and the statement that they had been artificially made was proved to be true. The party proceeded for ten or twelve yards, but then found that the way had been blocked by a comparatively recent fall of débris, and the enterprise had therefore to be abandoned. We commend it to fellow-voyagers and anthropologists.

We sailed the next morning at daybreak and our navigator, instead of taking the eastern road, by which we had come in, and going round the island, decided to attempt as a short cut the much narrower exit on the west, which lay between the precipitous cliffs that separated the cape proper from the mainland. By the soundings recorded on the chart there was everywhere sufficiency of water for our draught, but, while approaching the coast to take a direct course through the gorge, we were suddenly aware that the stern of the vessel had taken the ground. There was a moment of anxiety as to whether

she had hit on an outlying rock, but happily she had only come in contact with a bank of drifted sand. We were, however, very near a rocky coast, and it was not far from high water. As much weight as possible was taken into the bows, a kedge was carried out astern, and she was hove off the way she came on.

The next morning we were at the entrance to Rio de Janeiro. There was, however, not a breath of wind, and the engine was giving trouble; it refused to run more than a very short distance without becoming dangerously heated—a state of things subsequently found to be due entirely to improper installation. We sat, therefore, for twelve hours gazing at the tumbled mass of blue mountain-barrier, through the narrow opening in which the sea has found its way and formed the great sheet of water within. In front of us was the well-known conical form of the Sugar-loaf, to the west Corcovado, the Hunchback, with its strange effect of a peak which is bending forward, and beyond it Gavea with its table-top. The night fell, lights came out within, we still waited like a Peri at the gate of Paradise. The evening breeze, however, wafted us nearer, and at midnight we passed silently between the dark heights which guarded the entrance and dropped anchor in Botafogo Bay under the shelter of the Sugar-loaf, there to await the dawn.

It is an entrancing experience to wake on a sunny morning and find oneself for the first time among the soft and glowing beauty of Rio Harbour. We went up the bay in the early light, with a man posted at the flagstaff to exchange greetings with the Brazilian men-of-war which lay at anchor; it was always our duty to dip first to warships, as it was the place of merchantmen to take the initiative with us. We finally took up our position some three miles higher up opposite to the old city.

It is the suicidal fate of each visitor to try to describe Rio de Janeiro, and fail in the attempt; but with every warning to refrain the present chronicler must likewise rush on her doom. The first impression is that there is so much of it. It is not merely an enormous and beautiful bay, with a city upon it—it is a huge expanse of water, of which the whole margin, as far as the eye can reach, is used by man for his dwelling. To compare it with the bays of Naples or Palermo, or with the cities of Edinburgh or Athens, is, as far as size is concerned, to speak in the same breath of some picturesque manor-house and of Windsor

Castle. There are many places with wilder charm or more historic interest; but for what can only be termed "sleek beauty" Rio is incomparable. Every portion of the scenery is right, there are no parts of it which the eye consciously or unconsciously omits, and in whichever direction the gazer looks his æsthetic sense is satisfied. The shore-line disdains monotony and breaks itself into bays and islands. The great mountains, though they may lose in quiet dignity, range themselves in weird and striking shapes which attract the eye, while the verdure fulfils its purpose of showing off their beauty, here clothing a hillside with forest, there leaving bare a towering cliff. The white buildings which wander up hill and down dale are clean and prosperous, neither too new nor too old; they surround bays and stretch out to islands, not in oppressive continuity, but broken with the surface of the ground, while the gardens and boulevards with their tropical foliage know just how to intersperse themselves at the right intervals. The sun and air also appreciate their share in the situation, and flood mountain and water, verdure and the work of man, with wonderful transparent light, till the whole shines pure and soft, blue and green, like an opal. The night is not less beautiful; then the summits of the mountains show dark against the sky, myriads of lights outline the near bays, shine out from the islands and twinkle irregularly up the hillsides, while from the further shore another galaxy are reflected half-way across the still dark water. The whole gives the impression of some magic scene in the *Arabian Nights* lit up for a great *fiesta*. Rio is wonderful, marvellous; it leaves one like the Queen of Sheba; and yet—when I am dead I hope that I may return and visit the little bay of Santa Cruz, I know I shall pass by Rio de Janeiro.

The old part of the city is composed of narrow and noisy lanes, but the new boulevards are fine and broad. We did the usual sightseeing, with the details of which it is not proposed to trouble the reader. We had the pleasure of enjoying the hospitality of our Minister, Sir W. Haggard; but to my disappointment, for I had been looking forward for weeks to some feminine society, Lady Haggard was in England, and everyone else seemed to be a bachelor. By the most kind care of the British Consul, Mr. Hamblock, we had a memorable motor drive of some seventy miles through the mountains to the west of the

bay, including the tract of forest reserved for the public by Dom Pedro. It has left us with a bewildered impression of roads winding below great crags, amongst tropical vegetation, and opening at intervals on vistas of rocky coast and deep blue sea. We visited the botanical gardens, admiring their marvellous avenue of palms: similar ones, and but little inferior, may be seen in many directions, rising amongst streets and houses like the pillars of a Greek temple. We ascended the Sugar-loaf by aerial railway, and gained a panoramic view of the harbour. Finally, a day was spent at Petropolis, a small place among the mountains at the head of the bay, which is reached by a railway with cogwheel gauge and is the special resort of the diplomatic colony. We lunched at an inn of which the walls were adorned impartially with portraits of the Hohenzollerns and French Presidents, the host turned out to be an Alsatian.

If at Rio every prospect pleases it is not altogether free from drawbacks: sanitary conditions have improved; but the pride the city takes in its public gardens and boulevards does not extend to the water of the harbour, which is repulsively dirty, and ships are warned in the Sailing Directions against using it even for washing their decks. When the American fleet visited Rio they consumed so much from the shore for that purpose, that there is said to have been almost a fresh-water famine in the city. When we left the bay our bill of health stated that the previous week there had been two cases of yellow fever, both dead, and two of bubonic plague, who were still alive. Even with our experience at Pernambuco the prices charged at Rio left us breathless: engineering work cost from four to five times as much as in England; even a poor man on the docks complained to our Sailing-master that he could not get a meal under 2*s.* 8*d.* One Englishman, professionally employed, calculated that the cost of his passage home every three years was met through the saving effected on buying his clothes in England. Finally, the Stewardess of the *Mana* was of the opinion that the limit was reached, when one shilling was charged for washing a pair of stockings.

The Brazilians of Rio appear to have more European blood than those who live further north, though a mixture of Indian or Negro is viewed with the same equanimity. The idea of government is democratic, and in theory at any rate the President will

give an audience to the humblest Brazilian. The senators are paid £7 a day while sitting, so that an easy way of defraying debt is to prolong the session. The Central Railway belongs to the Government, and is regarded as giving billets for its supporters: engine-drivers, for example, are paid at a rate of from £700 per annum, the consequent large deficit on the working of the line being made good by the Treasury. There had been no political excitement very recently at Rio, but one old man was pointed out to us who, as governor of a northern state, had held his position by force and fraud until about a year previously, when he had been escorted by armed men on board ship and told that if he returned he would be shot.

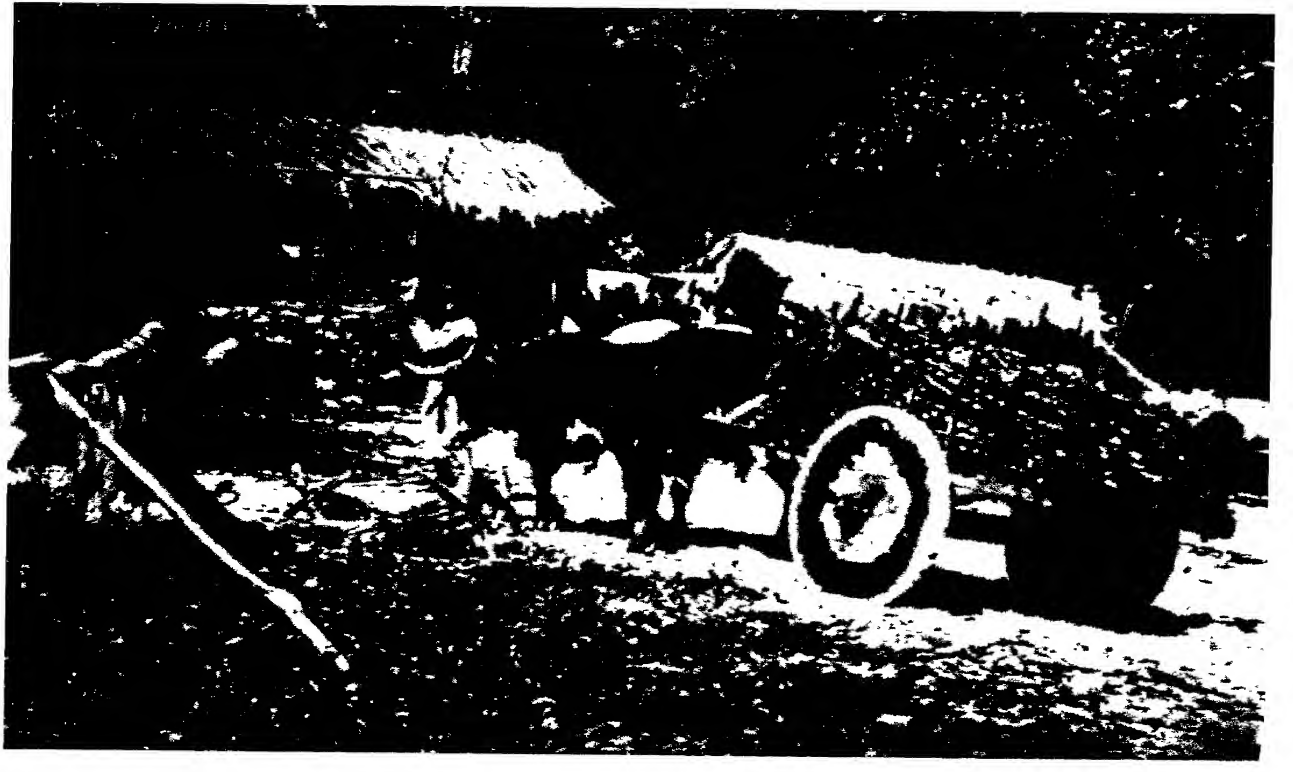
We left Rio Harbour at daybreak on Wednesday, July 23rd, after a visit of nine days, and to our relief found a good sailing breeze outside. As Buenos Aires, at which we were bound to call for stores and letters, was still some 1,100 miles distant, it was decided to break the voyage, and the Sailing Directions were studied for some out-of-the-way stopping-place *en route*. We had found by experience that little anchorages were preferable: not only was there more confidence in the water supply than in the case of big towns, but there was no trouble with authorities, and bills of health, and the temptations of a big port were avoided. The smaller places also, if in some ways less interesting, were more attractive. The little bay of Pórto Bello was selected, but when its neighbourhood was reached the following Sunday the weather had become rather thick and there was some difficulty in finding our way. At tea-time our Navigator came down somewhat amused to tell us that, during our afternoon siestas, *Mana* had wandered in and out of a wrong bay, about twenty miles north of our destination; a small steamer in front of us had also obviously been in need of a signpost or kind policeman.

On Sunday afternoon we dropped anchor safely in a sheltered part of Porto Bello Bay known as Aco Cove. Our previous halts, the town of Pernambuco, the coral bay at Santa Cruz, the rocky basin of Cape Frio, and the world-famed harbour of Rio de Janeiro, bore little resemblance to each other, but they had one point in common, that they were all obviously South American. Porto Bello had nothing South American about it save its very unoriginal Spanish name; it might, as far as

general appearance went, have been a loch imported straight from the west coast of Scotland: the accent of our Glasgow engineer became unconsciously more homelike, as he remarked that it was "just like the scenery near Oban," and to add to the illusion the weather, though warm, was a "wee bit saft," with the nip in the air associated with Scotland in August.

The town of Porto Bello itself lies at the foot of the bay. It will be found marked in the atlas of the infallible Stieler, but it is nothing more than a hamlet, consisting of a few small houses, with a church and one little store; there was no inn visible, but it is apparently connected with the outside world by telegraph or telephone. Shanties, surrounded with banana groves, wandered up the hillsides or clustered round such sandy coves as Aco; some were made of wattle and daub, others of wooden planks roofed with banana leaves or rough red tiles. We made friends with a family who occupied a cottage near the stream which supplied our water, and some of the party, a grandfather, father, and small daughter, came off on their own initiative to pay us a visit on board. They brought presents of eggs and molasses, and three special shells as an offering for me. The gifts which we on our side found were most appreciated, both here and elsewhere, were tobacco, sweets, and ships' biscuits; the last were specially prized, being often preferred to money. We showed our visitors over the vessel, and expected that such fittings as electric light would produce a mild sensation, but it was proved as usual that the eye can only take in what it has sufficient knowledge to appreciate. The greatest success was achieved by the supply of carpenters' tools, which excited much admiration, while the pier-glass in my cabin came in a poor second. A rather embarrassing situation arose when the old man, who was getting a little imbecile, found the yacht so attractive that he sat down in the deck-house and declined to depart.

The quiet lives of these people, surrounded by agricultural holdings with tropical produce, reminded us much of the existence of some of the natives in East Africa. They were apparently not above the belief in charms, for opposite our friends' door was a dried bush about four feet high, which had on the extremity of each bough an eggshell, some fifteen in number; we never succeeded in finding out its precise meaning, for un-



fortunately our ignorance of the Portuguese language made any real conversation impossible. The appliances of life were simple: an ox-cart had solid wooden wheels, after the manner of an ancient British chariot, the noise made by which was portentous; and the anchors of the boats were of wood, the shank being formed of a frame of sticks, into which rocks were packed.

The business of watering the ship being ended, we tried to continue our journey, only to find that a dead calm reigned outside, and there was nothing to do but to return. Two or three days of detention passed very pleasantly exploring hill-tracks, photographing, and sketching. We were able to buy poultry, eggs, and oranges, and the men were very successful with the seine, getting quantities of delightful mullet. One afternoon we took our tea in the launch to the other side of the bay, but here for the only time we found the people a little suspicious and not quite friendly.

Saturday, August 2nd, we again made our way out of Porto Bello. Our course lay in the direction of the island of Sta. Catharina, some twenty miles to the southwards, and the whole of the next day we drifted along in sight of its beautiful mountainous coast-line. This was the rendezvous appointed by Anson for his fleet on his outward voyage, as it possessed an excellent reputation for stores. He sailed there direct from Madeira, arriving in December 1740; his voyage took forty-five days, as against our forty-eight days at sea to Porto Bello, by Cape Verde Islands and Pernambuco. Anson was, however, disappointed in his reception, as the governor proved himself unfriendly, and sent a messenger to communicate the presence of the squadron to the Spanish admiral, who lay with his ships in the River Plate. We occupied the time in endeavouring to check from the yacht the sketches given of the coast in the contemporary account of his voyage. Later on we more than once found ourselves on Anson's track.

The following days afforded great variety of weather, but it grew rapidly colder, and warm clothes which had been stowed since Madeira had to be brought out. The wind, which for a time was strong and fair, later veered round to the south-east and subsequently to the south-west. Our navigators were early anxious about the indications, fearing a *pampero*, the name by which the particular gales are known which sweep down from

the Andes over the *pampas* or great plains of the mainland, and on Monday, August 4th, the mainsail was stowed. Thursday we had a strong wind, accompanied by a most extraordinary display of lightning; from midnight till 5 a.m. the place was lighted up almost without intermission, and there were reported to be at times as many as five to eight flashes visible at once; at first there was no thunder, but subsequently it became audible. The next two days we beat against a head wind.

On Saturday evening we were placidly seated at dinner when the cry came, "All hands on deck." Suddenly, without at the last a moment's warning, the *pampero* was upon us. A half-finished meal was left to hurry up the companion and join in stowing sails. All night long the gale raged, straining at the rigging, tossing the ship from side to side, rattling everything in her above and below. The waves swept over the deck until it seemed as if their force might at any moment carry away the boats or burst in the door of the deck-house; notwithstanding the heavy storm-boards with which it was always barricaded at such times. There was no sleep for anyone on board. The steward was up all night making cocoa for those on deck, for it was bitterly cold. As to the watch below, "a man," as Mr. Gillam said, "who could care so little what was going on above as to be able to sleep on such a night, simply because he was off duty, was no sailor worth the name." Four a.m. found two of us engaged in meditating on the "wet sea boy" who managed to have his eyelids sealed on the giddy mast during "the visitation of the wind," wondering whether he was an Elizabethan product or if we only owe his creation to the fact that Shakespeare was a landsman. I believe, from continued observation, that a good crew really like a gale, it has the "joy of battle." As to the Stewardess, her journal, which is not given to soliloquising, runs, I find, as follows in connection with the *pampero*: "It has been made painfully clear to me that my presence on deck when things are bad is an added anxiety; this is humiliating, and will not, I trust, apply to the next generation of females."

When I came up next morning the wind was still raging fiercely, but there was a pale blue sky flecked with white clouds, and bright sunshine sparkled on the countless white crests of foam which covered a dark blue sea. I looked, with an instinct

which during all these months had become second nature, to see who was at the wheel, and found, with a shock, that it was deserted—the helm was lashed! It felt for a moment as if the ship were some dead thing, with all power of spontaneous movement, all volition gone. For the time being she was vanquished by the elements, or at least reduced to armed truce; we were hove to and drifting slowly eastward, undoing all the work of the last two days. "Rough on us, ma'am," as Light said with a jovial laugh. At noon we had lost ground by 24 miles, and were now 373 miles from Buenos Aires instead of 349.

Monday, 7 a.m., we began to sail, beating against the wind, but by midday we had lost still further, being now 402 miles away from the haven where we would be. We envied the cape pigeons, twenty or thirty of which followed the vessel, as she was towing bags of heavy oil to windward to prevent the waves from breaking, and the smoother water made it easier for them to see the small fish below. They seemed to enjoy the gale, and swept round the yacht gracefully, showing off their white bodies and dark wings barred with white. They trod the water at intervals as they ran along it on the tips of their feet, and rode in the troughs of the waves securely sheltered from the wind. On August 12th we signalised the day by making a bag, one gull, but it came as a guest and was entitled to hospitality. It was apparently tired out, and perched on one of the boats; but when S. began throwing some meat overboard, with the object of attracting and photographing the cape pigeons, it joined in the scramble. The pigeons, however, would have none of the stranger, and set upon it, whereupon, worsted in the fray, the gull again sought refuge on the vessel: there it stayed all night, sleeping quite low down in the folds of some canvas and allowing itself to be stroked and fed by any passer-by. With the morning, being rested and refreshed, it flew away.

CHAPTER IV

ARGENTINA

The River Plate—Buenos Aires, its Trade and People

The Argentine Republic is the modern representative of the Spanish colonies on the east coast of South America, as Brazil is that of the Portuguese. Fifteen years after the landing of Cabral, Spanish sailors first sighted the entrance to the Rio Plata, and in 1535 Mendoza established a settlement on the site which later was Buenos Aires. No gold or silver, however, was to be found, and the Spaniards looked on their holdings on the South Atlantic merely as a back door to their richer possessions on the Pacific. Till the eighteenth century all their South American territories were under the Viceroy of Peru, and in order to suit the convenience of that colony no ship was allowed to trade direct with Buenos Aires; all the merchandise from Europe had to be fetched over the Andes. It was not till the first richness of the mines was exhausted that attention was drawn to the grass-covered plains of the east.

The Napoleonic wars, which turned Brazil from a colony to an empire, ultimately led to the establishment of republican rule in the Spanish colonies. Pitt, however, made a mistake in judging in 1806 that the discontent felt by the younger nation with the rule of their mother-country would make them unite in the war against her. He sent an armed force to the River Plate, but his full expectation that there would be a local rising was grievously disappointed; Buenos Aires was captured, but the British were subsequently heavily defeated and obliged to return home. The anniversary of the "reconquest" is yearly celebrated, and the newly arrived Briton, who probably never heard of the occurrence, finds that in Argentina his country is regarded as a defeated nation.

The loyalty of the colonists to the Crown of Spain was not, however, of long duration. Seeing that in the old country all authority was in the melting-pot, a secret society was formed in Buenos Aires, of which Belgrano was a leading member, to work for representative government; popular desire for freedom became too strong to be resisted, and on May 25th, 1810, the viceroy resigned. From that date the independence of Argentina is officially reckoned. The Argentines then successfully assisted the revolutionaries of Chile. Disputes subsequently arose as to the boundary between the two countries; these differences were referred, at the beginning of this

century, to the Crown of England, which appointed a commission to deal with the matter, and a treaty was agreed upon in accordance with its recommendations.

On Friday morning, August 15th, land became visible, and by 2 o'clock we were off Flores Island, the entrance to Rio Plata, where we took up a pilot for its navigation. The river is there about a hundred miles across, but narrows rapidly, and two hours later we were opposite Monte Video, where it is only half that width. Of Monte Video itself we could see only the outline. We proposed visiting it later by one of the steamers which run there every night from Buenos Aires, but were discouraged from doing so by the report that there was nothing whatever to see except an inferior Buenos Aires, and that the seaside resorts in the neighbourhood, which were filled in the summer by the Argentines, would be closed at that time of year. The Plate River is dull and dreary, having the charm neither of a river nor of the open sea; it consists of a vast expanse of turbid yellow water, marked by buoys and the wrecks of ships which have gone aground on its dangerous shoals. The western bank only was visible, and that was low-lying, with a suspicion—was it only a suspicion?—of tall chimneys. We felt that as far as beauty went we might as well be at the mouth of some English mercantile river, and certainly, as was remarked, we had much better have been there from the point of view of getting the needed work done on the ship. A number of insects of all sorts appeared on the yacht when we were at least four miles from the shore, suggesting that, if so many could land on one small ship, many millions must be blown out to sea.

At noon the following day we anchored for a short time, as the current was too strong for us, and at evening anchored again, apparently in the middle of nowhere, though with twelve large vessels as neighbours. We were in reality at the entrance to the Dredged Channel, where artificial means have had to be employed to make the river navigable for ships of large draft. Here it is necessary to pass the quarantine authorities and obtain a fresh pilot, which formalities being duly complied with, we proceeded next day on our journey. As it nears the city the Dredged Channel divides into two; one branch leads to the basin at the north end of the docks, the other to that at the south end. The docks at Buenos Aires, instead of being stowed away as an

undesirable excrescence in some remote part of the town, as is the case in most large seaports, form a frontage of some three miles to the most important part of the city, and appeal strongly to both the eye and the imagination. There, in ordered sequence, not by units—as, for example, at Southampton or Marseilles—but by hundreds, lie great vessels of all descriptions from almost every country in Europe; the outward sign of the great carrying trade between the old country and the new. They have brought their human freight and cargo of manufactured goods, and are waiting to return with a food-supply of livestock and grain. Even these docks are not equal to cope with the demand for accommodation, for in the grain season as many as a hundred may be seen in the outer roadstead awaiting admission, and large extensions were in progress. Argentina is one of those new lands which stand in the position of rural estate to older and manufacturing Europe; the supply of food, which in the earliest stages of the world's development lay next each man's dwelling, and then outside the towns, is now brought across 7,000 miles of ocean.

Little *Mana* was most kindly welcomed by the port authority, and awarded a place of honour by the entrance to the North Basin, which is generally reserved for men-of-war. Here she appeared elegant but minute, and not being a battleship felt her position somewhat precarious. The next berth was occupied by a large emigrant ship, which was German, French, and Italian by turns, and as the yacht was immediately under the stern it looked as if, with the least motion, she would be crushed out of existence. Every time a huge ship went out of the entrance to the harbour, all on board rushed to the yacht's deck to see if her bowsprit was about to be carried away. The manœuvring of the big vessels by tugs in a limited space is, however, wonderful, and though we had one or two narrow escapes, either the position was not so perilous as appeared, or we became accustomed to alarms, for we finally lived there quite comfortably. We landed either by boat across the docks, or by scrambling up a wharf like a house-side by means of a lengthy and somewhat shaky ladder. I have a vivid mental picture of His Majesty's Minister, Sir Reginald Tower, when he was good enough to come and see us, standing on the top with a little dog, and not unnaturally wondering how on earth he was expected to descend.

We lay at Buenos Aires for over a month, refitting and stowing, before facing the next part of the voyage. We grudged the delay, but even with the kind help we received there is, as has already been explained, much time inevitably lost in a new port, and New Spain, like its European prototype, is essentially a country of *mañana*. In the end we had to leave without getting the trouble with the engine put right. The stores sent ahead from England arrived safely, and through the courtesy of the Legation we received them custom free, but on some articles, which were unluckily ordered to come by post—a serge suit, linen coat, and two washing blouses—we had to pay £4 duty. I spent a portion of the time in luxury at an hotel while *Mana* had a much-needed spring-cleaning. S. lived on board, and I found on my return had had a good many visitors, whom he appeared to have enjoyed showing over the yacht with her hatches up and the floor covered with packing-cases; maintaining, in reply to my chagrined comments, that the public were shown over the *Terra Nova* in just such a condition.

In such time as could be spared from the work of the Expedition we saw what we could of the life of the country, and our observations are given for what they are worth. Unlike Pernambuco there is no doubt as to the economical *raisons d'être* of the Argentine; they are, of course, grain and meat. The area under cultivation, which we did not see, is steadily increasing, but the grain export is still far below that of the United States. The greater part of the mutton supplied to Great Britain comes from Australia and New Zealand, but the Argentine provides 72 per cent. of the beef which we receive from abroad, and we were much interested in seeing something of the cattle industry. We visited, by the courtesy of the owner, Señor Pereyra, an *estancia* about an hour's journey from Buenos Aires. The train traversed first the suburbs of a great town, then low country often under water, and we alighted at a little railway station, from which we immediately entered the park of the *estancia*. The estate was large, though there are others which exceed it; it covers fifteen square miles, a portion of which is, however, undrained. It has been in the occupation of the same family for about ninety years, during which time continual planting has been going on. The road which led through the park to the house passed under several fine avenues; the eucalyptus trees of older growth were

most beautiful, and a revelation of what that tree can attain, to those who have only seen it in temperate climates or in the villages and towns of South Africa.

The dwelling of the owner proved to be a most charming country house. The dining-room was panelled with oak, displaying the magnificent collection of silver cups gained by the stock of the *estancia*. Our host was in the proud position of having just won at the cattle show, then being held at Buenos Aires, the highest awards for both Herefords and Shorthorns. The competition for such prizes lies in the Argentine between a limited number of noted breeders, and it is felt well to bring in a judge from the outside. That year an English gentleman, well known in connection with the Royal and other shows, had been requested to act. Eighty thousand Argentine dollars, or over £7,000 sterling, were paid at this show for a champion bull, being the highest price yet given for such an animal. After luncheon we inspected the large farm buildings where the most valuable of the stock were housed. The remainder of the cattle, some 7,000 in all, lived in different large enclosures in various parts of the estate, with a cottage near-by for the caretaker. The owner was assisted by an English and a French manager, and 260 *peons* or labourers, mostly Italian, were employed on the *estancia*. They earn £3 10*s*. a month, with practically no expenses, being housed in a row of buildings with a mess-room in common. There was no lack of labour, applicants having continually to be turned away.

Our education was continued by a visit to the market at Buenos Aires, where anything up to 5,000 head of cattle are disposed of daily. These are brought from all parts of the Argentine, and were formerly driven across country. Now, however, owing to the prevalence of wire fences, they are generally brought by train. They are confined in open pens, and sold by auction or otherwise. The cattle auctioneers are men of high position, and regard themselves as the aristocracy of the city. The animation of the scene is increased by the number of rough-riders who career on spirited ponies up and down the alley-ways, looking after the stock and lassoing refractory beasts. No man connected with the "camp," as the open country is termed, ever thinks of walking at any time. The Argentine saddle has special characteristics, and consists of a pad each side of the spine of the

horse, above and below which rugs are placed, the whole being covered with a piece of leather and kept in place by girths, thus forming a most comfortable cushion. The stirrup is so made that only the toe can go into it, and the whole is calculated to allow a man to fall clear if he is thrown, a wise precaution in a land of unbroken mounts. It has also the advantage of providing excellent bedding, but is of course adapted for a flat country only, and would be out of place in a mountainous one. A kind acquaintance, seeing the interest S. took in the saddle, made him a present of one, which proved invaluable in Easter Island.

The majority of the beasts sold at the cattle markets are for local consumption: those going to the freezing manufactories are generally bought by private treaty. We were taken over one of the largest of these *frigorificos*, as they are called, where some 1,200 cattle and 3,000 sheep are killed daily. Each animal is inspected from a sanitary point of view on arrival, and every beast is again examined after it has been killed. It is skinned and cleaned at the same time, and in fifteen minutes, from the moment of being slain, is ready in two sides to hang up in the chilling or freezing chamber. Each of the sides is subsequently enclosed in a muslin covering ready to be shipped. The hides are, of course, also a most valuable commodity, and the fat is subjected to pressure, the oil being used for cooking purposes and the solid residue for candle-making. The unused portion of the beast is turned into guano. Some of the meat is reserved for canning, and the tinned goods are particularly attractive. Each tin is closed save for one small hole at the top, and is then passed into a vacuum pump, which extracts the air and closes the hole with an electric needle.

A very determined set was being made to bring all the Argentine *frigorificos* into the American meat trust; those which, like the one we visited, are determined to resist have to fight hard to hold their position. There was a loud outcry with regard to the increase in the price of meat, which had gone up retail to about sevenpence a pound; but buying through a ship's chandler, who could obtain it for wholesale prices, we were able to purchase at a lower rate. The prices for tinned meat were much the same as in England. Salt meat we were warned to avoid, as it could not be guaranteed for more than two months, though the remainder of our stock that had been put on board in England,

ten months before, was still in excellent condition. Every attempt, we were told, had been made to discover the reason for this failure, which is common to all meat south of the Equator; the services of experts from Europe had been requisitioned, the method, the meat, the salt, and the water had all been carefully examined, but so far without result.

The city of Buenos Aires itself, of which the docks have already been described, is simply a glorified port for this trade, and for the produce of a wealthy hinterland. The old part of the town, in which all business is transacted and which most impresses itself on the memory, is a labyrinth, or rather chess-board, of terribly narrow streets. The thoroughfares are at right angles, and the houses, which are in regular blocks, are all precisely similar in appearance; nothing, therefore, but an exact knowledge of the names and orders of the numerous streets as they lie in each direction of the chess-board can enable a stranger to find his way. The same street extends for miles, and he who forgets the number of his destination may as well give up the search. So narrow are these thoroughfares that two persons can only just pass on the pavement, and there is imminent danger of being pushed under the trams which run within fifteen inches of the curb. Traffic is only allowed in one direction.

In a town which has never been walled, and where space was no object, such a state of things is surprising; the original construction is said to have been due to the desire to obtain a maximum of shade, and any alteration now is of course fraught with much difficulty. Great efforts are, however, being made to render the Argentine capital worthy of its wealth and position. An imposing avenue, with the House of Congress at one end, has been cleared at great cost. The more recent portion of the town boasts good squares and parks, for the network of streets is but the hub of a huge and quickly growing city. Underground railways are being constructed, but so rapid is the extension of Buenos Aires that it is said they will only relieve the traffic for eleven years. The general impression of a bustling sea port with a southern element recalls Marseilles, but it has not the same beauty of situation. Buenos Aires has been called "a horrible travesty of Paris," but perhaps the most correct description is that which styles it "a mixture of Paris and New York."

Of what description are the people in whose hands lie the development of this country, with its growing influence on the destinies of the world? The new-comer arriving from the north is at once struck with the distinction between Brazil and the Argentine. Rio, with its strain of dark descent living in the midst of a dream of sleepy beauty, is still perhaps partly mediæval and undoubtedly tropical; Buenos Aires, on its flat plain and dreary river, is awake, twentieth century, and wholly European; but it is to the south of Europe that the Argentine is akin and not to the north. A Latin race was the first to colonise the new land, and successive waves of the same are still reaching its shores. In 1911 the immigrants from Spain, Italy, and France numbered nearly 2,000,000, as against 13,000 from Britain and 7,000 from Germany. Many Italians, it is true, come only for one harvest, or possibly for two, returning for the busy season in their own homes. The wages earned are such that the more idle are in a position to disdain all other work, and a crowd of loiterers round the docks, who appeared to us to be unemployed of the usual character, turned out to be agricultural workers living on their own resources till the next harvest. Many, however, of these immigrants settle in the new land, by the law of which every child born in the country becomes *ipso facto* an Argentine subject. It is perhaps because of this comparatively uniform origin that an Argentine type seems to be already developing. It is fundamentally that of Southern Europe, but it is moulded by a new environment, is wide-awake and energetic, with an absence of all mystery and tradition, but alive to the finger-tips. The practical aspect of life is the dominant note, whether for the native or temporary resident. "We are all here to make money," the stranger is frankly informed, "and we talk of nothing else." No apology shall therefore be made for once more referring to the question of pounds, shillings, and pence, for in South America it is impossible to get away from it.

The cost of living in Buenos Aires is two or three times as high as that of London in normal times. At the best hotel, usually frequented by European travellers, the smallest bedroom cannot be obtained under eighteen shillings a night, and even at the less dear hotels, resorted to by those to whom expense is an object, the ordinary price for dinner is five dollars or 8*s.* 9*d.*

"One thinks a good deal in England of a £5 note," was the remark to us of one Argentine; "here one never goes out without a fifty-dollar note (between £4 and £5) in one's pocket." Rents are enormous, and a would-be purchaser told us ruefully that he could not obtain in the suburbs a house with three sitting and four bedrooms, on a plot of ground some thirty yards square, under £15,000. All this falls hardly on the visitor or foreign official, but it affects the resident but little; an 8 per cent. investment is looked upon as reasonable and cautious, and for the working classes wages are proportionately high. The temporary immigrant who wishes to go back to Europe saves most of the money by living under very meagre conditions; thus two or three Italians frequently join together in one room at about half the rate paid by less thrifty workmen. Most visitors to Southern Europe are acquainted with the little mansions, built in the villages of their birth, by natives who have returned with modest fortunes from the Argentine, and this is the process by which that wealth is accumulated. More rapid roads are occasionally found to success. Our Sailing-master was acquainted with a former gaol-warder who went out as an emigrant from Southampton; his wife joined him, but came back before long, saying little but that her husband was also returning. In less than two years the man was back with a competency for the rest of his days, the source of which continued to be veiled in mystery.

Science, literature, and art do not as yet thrive very largely in Argentina, though exception must be made for the very interesting museum at La Plata, whose director was most kind in affording information to the Expedition. The great recreation is racing, in addition to which the inhabitants are all born gamblers. Sir Reginald Tower, to whose kind arrangements for us we owe much of the interest of our time in Buenos Aires, was good enough to take us to a race meeting, and we were greatly impressed with the lavish arrangements for the comforts of the spectators. It was also most pleasant to be spared all cries of the bookmakers—the betting system is that of the *pari mutuel*. The jockey club is the most important social club, and with an entrance fee of nearly £300 is naturally extremely wealthy; its existing premises are palatial, and even so the removal to larger ones was under consideration. We were kindly enter-

tained there by a distinguished representative of the early Spanish stock, Señor Calvo, to whom we were introduced while he was practising his profession of auctioneer at the cattle-market. His ancestor was a viceroy of the Court of Spain, and he is by descent on both sides a pure Spaniard; the cosmopolitan influences of to-day have, however, been too strong for the continuance of this tradition in the family, and he himself and other members of it have allied with outside nationalities. His father, who was responsible for the conduct of a public journal, had his life attempted three times by his political enemies, and finally sought refuge in England. There the son was born and educated, but later on, going out to the Argentine, he too entered public life and became a member of Congress, whose buildings it was most interesting to see under his guidance.

The life of Argentine women is almost that of the East. The men go their own way, make their own acquaintances, live their own life. They ask strangers but little to their homes, and it is possible to be on quite intimate terms with an Argentine and unaware whether he is married or single. Country-house hospitality scarcely exists, and even on the large *estancias* in the neighbourhood of Buenos Aires, a week-end party is unknown. A lady does not walk out alone, and never, even in her own home, receives a male guest without the presence of her husband. We have been credibly informed of a wife who boasted that during her husband's absence in Europe, of over a year, she never went out of the house. There is no higher education for women except for those training professionally, and the interests of the majority, like those of a certain set at home in pre-war days, consist mainly in bridge and dress. Forty years ago all women wore the mantilla, but to-day fabulous sums are spent on clothes. One charming Argentine lady told me that £30 was quite a usual sum to give for a smart but simple hat. At the seaside resorts the expenditure on clothes is so lavish, that it is cheaper to take the trip to Europe than to procure the necessary garments in which to be seen among your friends. In appearance the women are pretty and effective, but spoilt to the eyes of a European by the inordinate amount of powder. I was told by one present at the dinner-party in question of an amusing scene witnessed in the ladies' cloak-room; a daughter arriving with her mother called out, "Oh, mother, you have

not nearly enough powder on," and made a dash for the powder-puff to remedy with two or three large splashes the supposed defect. It is said that the wave of female emancipation is reaching South America, but doubt was expressed by a keen observer whether it would necessarily take its European form of a demand for political and legal rights, or whether the Argentine woman would not begin by desiring the same social and matrimonial liberty as is assumed by her husband. At present, unfortunately, with the vicious circle in which such customs move, much of the precaution taken to guard women appears to be necessary, and I was sadly informed by more than one English girl employed in the business houses of Buenos Aires, that the freedom with which young women can move and conduct themselves at home was not only conventionally but actually impossible in their new surroundings.[1]

Argentina, as the depository of much that is undesirable from other nations, can hardly hope to escape the blackguard element. Assassination is the only thing which is cheap in the South American continent. The head of one of the seamen's missions at Buenos Aires told S. that it was possible at any time to procure the murder of a man by paying five dollars, not quite ten shillings, in the right quarters: this was somewhat less than at Rio, where the price was stated to be thirteen shillings and fourpence. The scenes which occur nightly about the docks are incredible; hence returning to *Mana* after dark was always a matter of some anxiety. Our steward received a typewritten letter saying that he had been mentioned as a suitable man for a desirable situation, and giving an appointment after dark at a certain house in a certain street. On inquiry the address turned out to be that of a low street in the new part of the town, where much land is still waste, and there was no house yet built of the number given. With regard to the said steward, one Sunday evening he left the yacht and never returned. All anxiety about his fate was set at rest by the fact that he had cleared his cabin of all his goods. He may have been homesick and arranged to work his passage back, or he may have been enticed by a more substantial offer, a very usual occurrence where

[1] Lady Grogan informs me that one of the main reasons for the position of women in Argentina is that there is no Married Women's Property Act, and that even an heiress is therefore in ordinary course entirely dependent on her husband.

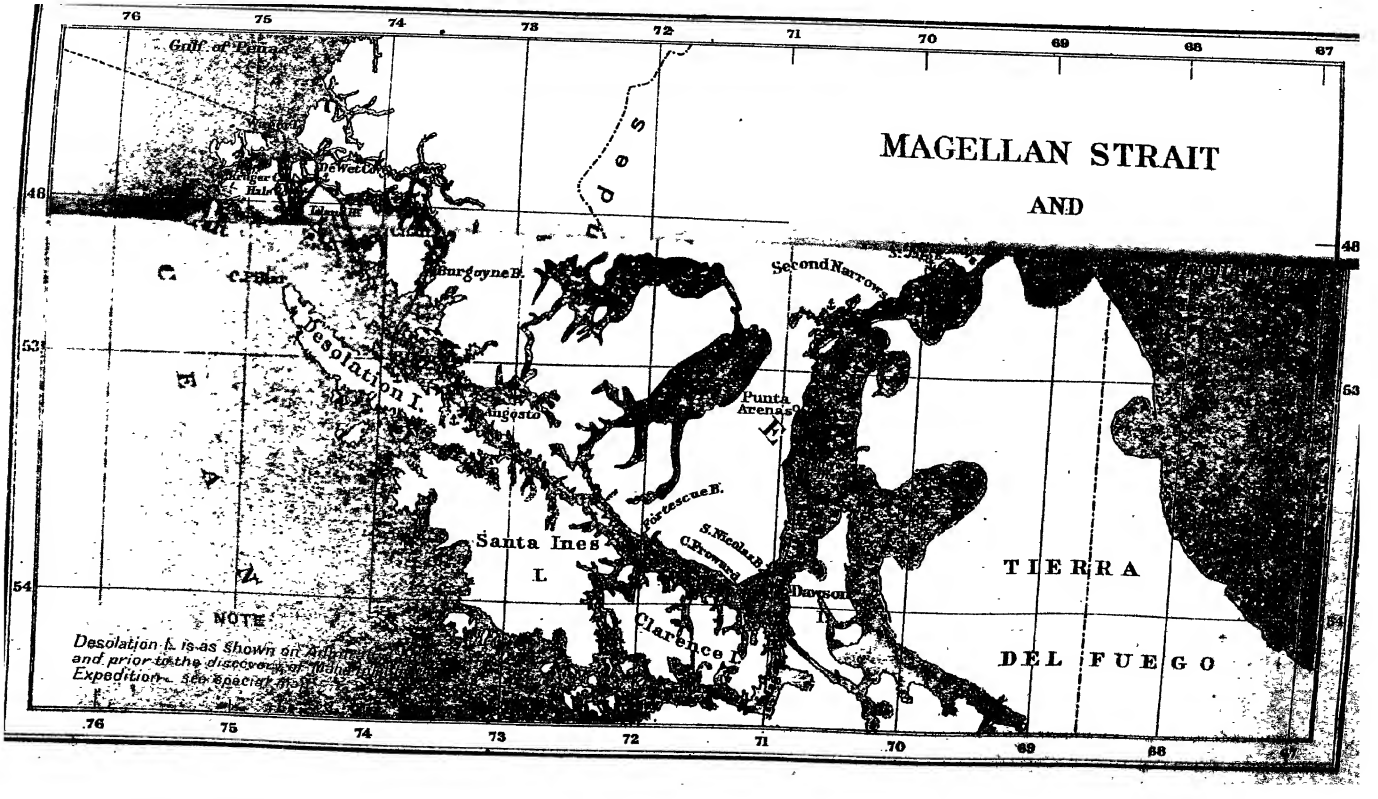
trained servants are difficult to obtain. As he had of course signed the ship's articles for the trip, his desertion was reported to the consulate and the police, but we were told that to get him back would be practically an impossibility ; while, scruples apart, nothing would have been gained by the simpler method of assassination. The man himself we did not regret, but after the manner of his kind he had waited till we were on the point of sailing, and therefore left us in the lurch.

In spite of the fact that personal safety still leaves a good deal to be desired, the Government of Argentina is one of the purest in South America; the result, it is said, of the wealth of her officials. She is already proudly conscious of her strength, and, in some quarters at any rate, is anxious to rely upon it alone for her position among nations rather than on any such external aid as the Monroe doctrine. Throughout the whole continent it is necessary in speaking of the citizens of the United States to term them carefully "North Americans," avoiding the usual and more abbreviated form.

Religion is not a powerful factor in Argentina either in public or private life. Roman Catholicism is officially recognised, but it does not strive to be a political force, and meets therefore with general toleration ; even when it is not practised it is neither hated nor feared. Many women and some men are devout, but the majority of men simply ignore it.

A Briton in leaving Argentina not unnaturally asks what is the share of his own countrymen in the development of the new republic. Our connection with it through trade is considerable. The railways are in British hands, and 61 per cent. of the shipping flies the Union Jack. In addition to young men who may wish to take up life in "the camp," or country, a certain number of Englishmen are employed in offices and professional positions, while in connection with retail trade, it is homelike to see the shops and advertisements of such firms as Harrod and Maple. A pleasing bond exists throughout the British colony in Freemasonry, which is a most living force, with many adherents, amongst whom our Minister is included. S. being one of the elect, we had, through the kindness of Mr. Chevalier Boutell, the Deputy Grand Master for South America, the pleasure of being present at a ladies' banquet, which proved a very brilliant and enjoyable entertainment.

While the English commercial position is still good, it is said that forty years ago our proportion of the trade was even greater. An old inhabitant told us that he knew personally of not less than twenty-five British firms who had gone under during that period, owing to the dogged incapacity of the Englishman to supply what his customer wanted, instead of what he himself chose to provide. Such failures leave, of course, the door open for German penetration. A reputation for the same want of adaptability, and also for being given to drink, makes Englishmen unpopular as employés. With regard to our women kind, certain posts in the town which are open to English girls are well paid, but they should be taken up in every case with the greatest caution, and the remuneration offered carefully compared with the increased cost of living. A woman who marries on to an *estancia* is necessarily comparatively isolated, and accounts differed as to the amount of help she is able to obtain in domestic labour. The 30,000 British subjects who form the whole of those resident in Argentina are, in any case, but a drop in the ocean, and they but seldom identify themselves with the country of their abode. It is not unusual for parents to arrange that their children shall be born in England, in order that they may avoid registration as citizens of the Republic, with its consequent liability to military service. It has been proposed in high quarters that suitable accommodation might be provided in the Falkland Islands, as nearer and more convenient British soil. Failing some such arrangement it is possible to register a child of British parentage which is born in Argentina, at the national consulate, and it is then *ipso facto* a British subject, except when actually in the land where it first saw the light. Whatever share Britain may have in developing the wealth of Argentina, that country never has been, and never will be, connected with us by blood; for that bond with new lands we must look to our own dominions over the seas.


MAGELLAN STRAIT
AND
TIERRA
DEL FUEGO
Gulf of Penas
Desolation I.
Burgoyne B.
Second Narrows
Punta Arenas
Fortescue B.
S. Nicolas B.
C. Froward
Santa Ines
I.
Clarence I.
Darwin
I.
NOTE
Desolation I. is as shown on Admiralty
and prior to the discovery of Indian
Expedition. See special map.
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CHAPTER V

PATAGONIA

Port Desire—Eastern Magellan Straits—Punta Arenas—Western Magellan Straits—Patagonian Channels

The most southerly portion of the South American continent, called Patagonia, first became known in the endeavour to find a new way into the Pacific. Magellan was commissioned by Charles of Spain to try to find by the south that ocean passage to the Indies which Columbus had sought in vain further north. He sailed in August 1519, and began his search along the coast at the River Plate; on October 21st, the day of the Eleven Thousand Virgins, he came in sight of a large channel opening out to the west: the promontory to the north of this channel still bears the name he bestowed of Cape Virgins. He proceeded cautiously, sending boats ahead to explore, and on November 28th entered the Pacific. When he saw the open sea he is said to have wept for joy, and christened the last cape "Deseado," or the "Desired."

The sea power of England, which had been negligible in the time of the first voyages to the New World, was growing in strength; and, though she had attempted no settlement on the southern continent, she saw no reason to acquiesce in the edicts of the King of Spain, shutting her off from all trade with the New World. In 1578 Drake took Magellan's route; with the object of intercepting galleons on the Pacific coast, and passed through the Straits in sixteen days. On entering the Pacific he was blown backward towards Cape Horn, and was the first to realise that there was another waterway, yet further south, from the Atlantic to the Pacific. Up till this time the land had been supposed to extend to the Antarctic.

A hundred years later Charles II of England sent an expedition under Sir John Narborough to explore this part of the world and trade with the Indians, which wintered on the eastern coast of Patagonia.

Anson's squadron avoided the Straits, taking the way by the Horn.

The Chilean and Argentine Boundary Commission divided Patagonia between the two countries, giving the west and south to Chile and bisecting Tierra del Fuego, 1902.

WE left Buenos Aires on September 19th, achieving the descent of the river without a pilot, and for the next fortnight had a varying share of fair winds, contrary winds, and calms. Our chief interest was the man who had taken the place of the

absconding steward, who shall be known as "Freeman"; we heard of him through a seamen's home, and arranged that he should go with us to Punta Arenas, to which place he wished for a passage. He was a clean-looking "Britisher," who for the last seven years had been knocking about South America. He brought with him a gramophone, and a Parabellum automatic pistol, with which he proved an excellent shot, and he made it a *sine qua non* that we should find room on board for his saddle; thus was my knowledge increased of the necessary equipment of an indoor servant. We paid him at the rate of £100 a year, and though we found that he could neither boil a suet pudding nor lay a table, so enlightening were his accounts of up-country life that we did not grudge him the money.

We flatter ourselves our experience in detecting mendacity would qualify us as police-court magistrates, but we never saw any reason to doubt the substantial accuracy of Freeman's stories. His experience dated back to the time when mares of two or three years old were sold for ten shillings, or were boiled down for fat, as, after the Spanish fashion, no man would demean himself by riding one. He had at one time ridden across the continent from the Patagonian to the Chilean coast, a journey of six weeks, half of which time he never saw a human being; he was followed all the way by a dog, though the poor animal was once two or three days without water; it got left behind at times, but always managed to pick up his trail. He was most candid about the means by which he had made money when at one time employed on the railway, for honesty was not in his opinion the way that the game was played in South America, and therefore no individual could afford to make it part of his programme: it did happen to be one of the rules on *Mana*, and we never knew him break it. He was once running away after some drunken escapade, when a policeman appeared and took pot-shots at him with a rifle. Freeman turned and dropped him with his revolver; he did it the more reluctantly as he knew and liked the man. Happily the shot was not fatal, and he felt convinced that he himself had not been recognised.

After, therefore, carefully arranging an alibi elsewhere he returned, condoled with the victim on the lawless deed, and gave him what assistance he could; he felt, however, that that part of the country had become not very "healthy," and sub-

sequently moved on. Even our experiences of the ports had scarcely prepared us for the cynical indifference to human life which his experiences incidentally revealed as an everyday affair in "the camp." In sparsely inhabited districts, with their very recent population, the factors are absent through which primitive societies generally secure justice, clans do not exist, families are the exception, and in almost every case a man is simply a unit. The more advanced methods of keeping the peace have either not been formed or are not effective, for crime is often connived at by the authorities themselves. The result is that the era of vendetta and private revenge seems civilised in comparison with a state of things where no notice is taken of murder, and the victim who falls in a brawl or by fouler means simply disappears unknown and unmissed, while the murderer goes scot-free to repeat his crime on the next occasion.

Freeman had, *inter alia*, been employed on one of the farms in Patagonia, along the coast of which we were sailing, and told tales of the pumas, or South American lions, which abounded in a certain neighbourhood. This district had railway connection with a little anchorage known as Port Desire, and as one of our intervals in harbour was now due S. arranged to turn in here, and go up-country with him to try to get a shot at the animals. We therefore put into the port on October 3rd. It is a small inlet, of which the surrounding country is covered with grass, but flat and dreary in the extreme, the only relief being a distant vision of blue hills. Sir John Narborough, who spent part of the winter here in 1670, said he never saw in the country "a stick of wood large enough to make the handle of a hatchet."

The human dwellings are a few tin shanties. In a walk on shore we were able to see in a gully, a few remains of the walls of the old Spanish settlement. As to the puma, fortunately from its point of view, the railway service left a good deal to be desired. We arrived on Friday, and there turned out to be no train till the following Tuesday, so it lived to be shot another day—unless indeed it met a more ignominious end, for the South American lion is so unworthy of its name that it is sometimes killed by being ridden down and brained with a stirrup-iron. We took three sheep on board, as mutton at twopence a pound appealed to the housekeeping mind, and were able to secure some water, which is brought down by rail; it was a relief to have

our tanks well supplied, as the ports further down the coast are defended by bars, and would have been difficult of access in bad weather. Drake, on whose course we were now entering, selected St. Julian, the next bay to the southward, for his port of call before entering the Straits of Magellan; it was there he had trouble with his crew, and was obliged to hang Doughty.

We sailed from Port Desire on Monday morning, but were not to say good-bye to it so speedily. We soon encountered a strong head-wind, with the result that Wednesday evening found us fifteen miles backwards on a return journey to Buenos Aires, and the whole of Thursday saw us still within sight of it. We amused ourselves by discussing the voyage, which had now lasted more than seven months. One of the company declared that he had lost all sense of time and felt like a native or an animal: things just went on from day to day; there was neither before nor after, neither early nor late. It did not, he said, seem very long since we left Falmouth, but on the other hand our stay at Pernambuco was certainly in the remote past, and so with everything else. We had now, in fact, done about three-quarters of the distance from Buenos Aires towards the Straits of Magellan, and had 300 miles left before we reached their entrance at Cape Virgins.

Ever since the Expedition was originally projected the passage of the Straits had been spoken of in somewhat hushed tones; but now, when with a more favourable wind we began to approach them, instead of going into Arctic regions, as some of us had anticipated, the weather improved, the sun went south faster than we did, and the days lengthened rapidly. Our numerous delays had at least one fortunate result—they secured us a much better time of year in the Straits than we had expected would fall to our lot. The feeling in the air was that of an English April, bright and sunny, but fresh; we kept the saloon cold on principle during the daytime, living in big coats; in the evening we had on the hot-water apparatus, so as to go warm to bed. It was quite possible to write on deck, and the sea was almost too beautifully calm. We had a great many ocean callers, who seemed attracted by the vessel: porpoises tumbled about the bows till we could nearly stroke them, a whale would go round and round the yacht, coming up to blow at intervals, while seals reared their heads and shoulders out of the waters

and looked at us in a way that was positively bewitching; once a whale and seal paid us a visit at the same time. One night S., who was keeping a watch for one of the officers who was indisposed, was interested in watching the gulls still feeding during the dark hours.

At 10 p.m. on October 15th the light of Cape Virgins was sighted, and we woke to find ourselves actually in the Straits of Magellan. The Magellan route, as compared with that by the Horn, is not only a short road from the Atlantic to the Pacific, cutting off the islands to the south of the continent, but ensures calm waters, instead of the stupendous seas of the Antarctic Ocean. For a sailing-ship, however, the difficulties are great; the prevailing wind is from the west, and there is no space for a large vessel to beat up against it, nor does she gain the advantage that can be derived from any slight shift of wind; outside the gale may vary a point or two, but within the channel it always blows straight down as in a gully. The early mariners could overcome these obstacles through the strength of their crews; in case of necessity they lowered their boats and towed the ship, but the vessels of the present no longer carry sufficient men to make such a proceeding possible. Sailing-ships therefore take to-day the Cape Horn route, in spite of its well-known delays, trials, and hardships. When later the German cruiser turned up at Easter Island with her captured crews, the great regret of the latter was that they had been taken just too late, after they had gone through the unpleasantness of the passage round the Horn.

The first sight of Tierra del Fuego is certainly disappointing. The word calls up visions of desolate snowy mountains inhabited by giants; what is seen are low cliffs, behind which are rolling downs, sunny and smiling, divided up into prosaic sheep farms. A reasonably careful study of the map would of course have shown what was to be expected, as on the Atlantic coast the plains continue to the extreme south of the continent, while the chain of the Andes looks only on to the Pacific. Nevertheless, if not thrilling, it was at least enjoyable to be in a stretch of smooth water, with Patagonia on the north and Tierra del Fuego on the south. The land on either hand is excellent pasture for sheep, and there is said to be sometimes as much as 97 per cent. increase in a flock. The largest owners are one or two Chilean firms, but the shepherds employed are almost all Scotsmen, and

indeed the scenery recalls some of the less beautiful districts in the Highlands. When sheep-farming was established, the Indians, not unnaturally from their point of view, made raids on the new animals, with the result that the representatives of the company were consumed with wrath at seeing their stock eaten by lazy natives; they started a campaign of extermination, shooting at sight and offering a reward for Indian tongues. Our friend Freeman had worked on one of the farms, which had a stock of 200,000 sheep, and the information he gave on this head was fully confirmed later in conversations at Punta Arenas. The destruction of the Indians was spoken of there as a matter for regret, but as rendered inevitable by circumstances.

The navigation through the straits of a craft like ours makes it necessary to anchor in the dark hours: the first night we spent off the Fuegian coast, in sight of one of the pillars which define the boundary of Chile and Patagonia; the second we lay in Possession Bay, which is on the Patagonian side. We had time at the latter anchorage to examine the pathetic wreck of a steamer, which had gone aground. She was a paddle-boat, which was being towed presumably from one lake or river area to another, and had to be cut adrift. Even in such an unheroic vessel it was touching to see the sign of departed and luxurious life cast away on this lonely shore, stained-glass doors bearing the inscription of "smoking" or "dining-room," and good mahogany fittings such as washing-stands still in place. It is said that the outer coast is strewn with wrecks containing valuable articles which it is worth no one's while to remove. S. walked up to the neighbouring lighthouse, and was presented with three rhea eggs.

The next morning we were under way at 5 o'clock, in order to pass with the correct tide through what are known as the First Narrows. The current here is so strong that it would have been impossible for us to make headway against it; as it was, the wind sank soon after we started, and we only just accomplished the passage, anchoring in St. Jago Bay. The following day, Sunday, we negotiated successfully the Second Narrows. From our next anchorage we saw from the yacht several rhea, or South American ostriches, on a small promontory. S. went ashore on the point and shot two of them, while Mr. Ritchie and Mr. Gillam, who had landed on the neck of the promontory,

FIG. 8.

IN THE MAGELLAN STRAITS.

S. and an ostrich.

endeavoured to cut off the retreat of the two remaining birds. The one marked by Mr. Ritchie went through some water and escaped him; the onlookers then viewed with much interest a duel between Mr. Gillam on the one hand, running about in sea-boots armed with a revolver, and the last ostrich on the other, vigorously using its legs and wings and on its own ground. Victory remained with the bird, which reached the mainland triumphantly, or at least disappeared behind a bush and was no more seen. Seven miles south-west of the Second Narrows lies Elizabeth Island, so named by Drake. We took the passage known as Queen's Road on the Fuegian side of the island, and reached Punta Arenas next afternoon, Monday, October 20th. We had intended to be there for two or three days only, but fate willed otherwise, and we sat for weeks in a tearing wind among small crests of foam, gazing at a little checkered pattern of houses on the open hillside opposite.

It will be remembered that the motor engine, to our great chagrin, was practically useless through heated bearings, and that all our endeavours at Buenos Aires to diagnose and remedy its ailment had been ineffectual. We had consequently to rely on passing through the Straits either under sail, or, as the late Lord Crawford had suggested to us before starting, through getting a tow from some passing tramp by means of a £50 cheque to the skipper, a transaction which would probably not appear in their log. However, in mentioning our disappointment to the British Consul, who was one of an engineering firm, he and his partner hazarded the suggestion that the defect lay, not in the engine, where it had been sought, but in the installation; that the shaft was probably not "true." They bravely undertook the job of overhauling it on the principle of "no cure, no pay," and were entirely justified by the result. The alteration was to have been finished in ten days, but there were the usual delays, one of which was a strike at the "shops," when a piece of work could only be continued by inducing one man to ply his trade behind closed doors while S. turned the lathe. It was six weeks before the anxious moment finally came for the eight hours' trial, which had been part of the bargain, but the motor did it triumphantly without turning a hair. We found what consolation for the delay was possible in the reflection that we had at least done

all in our power to guard against such misfortune. The engine had been purchased from a first-class firm who had done the installation; the work had been supervised on our behalf by a private firm and passed by Lloyds; nevertheless it was peculiarly aggravating, for not only did it involve great money loss, but it sacrificed some of the strictly limited time of our navigator and geologist. We had the pleasure at this time of welcoming the said geologist, Mr. Lowry-Corry, who now joined the Expedition after successfully completing his work in India.

Punta Arenas, with which we became so well acquainted, is a new and unpretentious little town, but it is the centre of the sheep-grazing districts, and its shops are remarkably good. Anything in reason can be purchased there, and on the whole at more moderate prices than elsewhere in South America. The beautiful part of the Straits is not yet reached, and save for some distant views the place is ugly, but it gives a sensation of cleanliness and fresh air, and our detention might have been worse. There is indeed, on occasion, too much air, for it was at times impossible to get from the ship to the shore or *vice versa*, and if members of the party were on land when the wind sprang up they had to spend the night at the little hotel; the waves were not big, but the gales were too strong for the men to pull against them. I was with reluctance obliged to give up some promising Spanish lessons, with which I had hoped to occupy the time, for it was impossible to be sure of keeping any appointment from the yacht. Punta Arenas boasts an English chaplain, and Boy Scouts are in evidence. The chief celebrity is an Arctic spider-crab, which multiplies in the channels and is delicious eating, but we never discovered anything of much local interest.

I made one day a vain attempt to find the graves of the officers and crew of H.M.S. *Dotterel*, which was blown up off Sandy Point some thirty years ago. The cemetery overlooked the Straits; it was desolate and dreary, the ground being unlevelled and the tufted grass, with which it was covered, unkept and unmown. Most of the graves were humble enclosures, some of which gave the impression of greenhouses, being covered with erections of wood and glass; but here and there were small mausoleums, the property of rich families or corporations. It is the custom with some Chileans so to preserve the remains that the faces continue visible; an Englishman at Santiago

told us that after a funeral which he had attended, the mourners expressed a desire to "see Aunt Maria," whereupon the coffin of a formerly deceased relative was taken down from its niche for her features to be inspected. The police of Punta Arenas had their home together in a large vault, which was apparently being prepared for a new occupant; while the veterans of '79 (the war between Chile and Peru) slept as they had fought, side by side. There was apparently no Protestant corner, for the graves of English, Germans, and Norwegians were intermingled with those of Chileans. The resting-places of all, rich and poor alike, were lovingly decorated with the metal wreaths so prevalent in Latin countries, but unattractive to the English eye. Whilst I wandered among the tombs a storm burst, which had been gathering for some time amongst distant mountains, and chilly flakes of snow swept down in force, with biting wind and hail. I sheltered in the lee of a mausoleum, on whose roof balanced a large figure of the angel of peace bearing the palm-branch of victory, and the inscription on which showed it to be the property of a wealthy family, whose name report specially connected with the poisoning of Indians. The landscape was temporarily obscured by the driving storm, not a soul was in sight, and the iron wreaths on hundreds of graves rattled with a weird and ghostly sound. Presently, however, the tempest passed and the sun shone out, while over the Straits, towards the Fuegian land, there came out in the sky a wonderful arc of light edged by the colours of the rainbow, which turned the sea at its foot into a translucent and sparkling green.

But if there was not much occupation on shore, the unexpected length of our stay provided us unpleasantly with domestic employment. We had on arrival parted from our friend Freeman, his object in coming to Punta Arenas was, it transpired, to collect the remainder of a sum due to him in connection with the sale of a skating-rink, which he had at one time started there and run with considerable success: we were proud to think that service on an English scientific vessel would now be added to his experiences. Life below deck was then in the hands of Luke, the under-steward, who, as will be remembered by careful readers, had been the salvation of the inner man during our first gale in the North Atlantic. We had engaged him at Southampton on the strength of a character from a liner on which he had

served in some subordinate capacity, and he signed on for the voyage of three years at the rate of £2 10s. a month. Though never what registry offices would call "clean in person and work," he plodded through somehow, and again in the Freeman episode rescued the ship from starvation; we accordingly doubled his wages as a testimonial of esteem. My feelings can therefore be imagined when one morning, after we had been some weeks at Punta Arenas, I was told that Luke was not on board and his cabin was cleared. He had somehow in the early morning eluded the anchor watch and had gone off in a strange boat. A deserter forfeits of course his accumulated wages, which, by a probably wise regulation, are payable to Government and not to the owner; but there is nothing to prevent a man who is leaving a vessel recouping himself by means of any little articles that he may judge will come in handy in his new career. The one that I grudged most to Luke was my cookery book, to which he had become much attached, and which was never seen again after his departure; it was really a mean theft, from which I suffered much in the future.

S. offered, through the police, a reward for his detention, and enlarged his knowledge of the town by going personally through every low haunt, but without success. A rumour subsequently reached us that a muffled figure had been seen going on board one of the little steamers which plied backwards and forwards to the ports in Tierra del Fuego, and we heard, when it was too late, that Luke had been enticed to a sheep farm there, with the promise of permanent employment at £10 a month, with £2 bonus during shearing-time, which was then in progress. The temptation was enormous, and I have to this day a sneaking kindliness for Luke, but for those who tempted him no pardon at all. The condition in which the successive defaulters had left their quarters is better pictured than described, and so stringent is the line of ship's etiquette between work on deck and below, that, as the simplest way and for the honour of the yacht, the Stewardess did the job of cleaning out cabin and pantry herself. The moral for shipowners is—do not dally in South American ports.

Now began a strange hunt in the middle of nowhere for anything that could call itself a cook or steward. The beach-combers who applied were marvellous; one persistent applicant

PUNTA ARENAS.

was the pianist at the local cinema; our expedition, as already discovered, had a certain romantic sound, which was apt to attract those who had by no means always counted the cost. Mail steamers pass Punta Arenas every fortnight, once a month in each direction, and these we now boarded with the tale of our woes. Both captain and purser were most kind in allowing us to ask for a volunteer among the stewards, but the attempt was only temporarily successful; the routine work of a big vessel under constant supervision proved not the right training for such a post as ours.

Finally, we were told of a British cook who had been left in hospital by a merchant ship passing through the Straits. The cause of his detention was a broken arm, obtained in fighting on board; this hardly seemed promising, but the captain was reported to have said that he was "sorry to lose him," and we were only too thankful to get hold of anything with some sort of recommendation. On the whole Bailey was a success. He too had knocked about the world; at one time he had made money over a coffee-and-cake stall in Australia, and then thrown it away. We had our differences of course; he once, for instance, told me that as cook he took "a superior position on the ship's books to the stewardess," but his moments of temper soon blew over. I shall always cherish pleasant memories of the way in which he and I stood by one another for weeks and months in a position of loneliness and difficulty; but this is anticipating.

As departure drew near, provisioning for the next stage became a serious business, as, with the exception of a few depots for shipwrecked mariners, there was no possibility of obtaining anything after we sailed, before we reached our Chilean destination of Talcahuano. S.'s work was more simple, as he had only to fill up to the greatest extent with coal and oil, knowing that at the worst the channels provide plenty of wood and water.

The next few weeks, when we traversed the remainder of the Magellan Straits and the Patagonian Channels, were the most fascinating part of the voyage. The whole of this portion of South America is a bewildering labyrinth of waterways and islands; fresh passages open up from every point of view, till the voyager longs to see what is round the corner, not in one direction, but in all. It has, too, much of the charm of the unknown; such charts as exist have been made principally by

four English men-of-war at different periods, the earliest being that of the *Beagle*, in the celebrated voyage in which Darwin took part. A large portion of the ways and inlets are, however, entirely unexplored. The effect of both straits and channels is best imagined by picturing a Switzerland into whose valleys and gorges the sea has been let in; above tower snow-clad peaks, while below precipices, clothed with beautiful verdure, go straight down to the water's edge. The simile of a sea-invaded Alps is indeed fairly accurate, for this is the tail of the Andes which has been partially submerged. The mountains do not rise above 5,000 feet, but the full benefit of the height is obtained as they are seen from the sea-level. The permanent snow line is at about 1,200 feet. The depths are very great, being in some places as much as 4,000 feet, and the only places where it is possible to anchor are in certain little harbours where there is a break in the wall of rock. These anchorages lie anything from five miles to twenty or thirty miles apart, and as it was impossible to travel at night it was essential to reach one of them before dark. If for any reason it did not prove feasible to accomplish the necessary distance, there was no option but to turn back in time to reach the last resting-place before daylight failed, and start again on the next suitable day. On the other hand, when things were propitious, we were able on occasion to reach an even further harbour than the one which had been planned.

The proceeding amusingly resembled a game, played in the days of one's youth, with dice on a numbered board, and entitled "Willie's Walk to Grandmamma": the player might not start till he had thrown the right number, and even when he had begun his journey he might, by an unlucky cast, find that he was "stopping to play marbles" and lose a turn, or be obliged to go back to the beginning; if, however, he were fortunate he might pass, like an express train, through several intermediate stopping-places, and outdistance all competitors. The two other sailing yachts with whose record we competed were the *Sunbeam* in 1876 and the *Nyanza* in 1888: the match was scarcely a fair one, as the *Sunbeam* had strong steam power and soon left us out of sight, while the *Nyanza*, though a much bigger vessel, had no motor, and we halved her record.

It will be seen that it was of first-rate importance to make the

most of the hours of daylight, which were now at their longest, and to effect as early a start as possible, so that in case of accident or delay we should have plenty of time in hand before dark. We therefore, long before such became fashionable, passed a summer-time bill of a most extended character, the clock being put five hours forward. Breakfast was really at 3 a.m., and we were under way an hour later, when it was broad daylight; but as the hours were called eight and nine everyone felt quite comfortable and as usual, it was a great success. The difficulty lay in retiring proportionately early. Stevenson's words continually rose to mind: "In summer quite the other way—I have to go to bed by day." The greatest drawback was the loss of sunset effects; we should, theoretically, have had the sunrise instead, but the mornings were often grey and misty, and it did not clear till later in the day.

One of the charms of the channels, is the smoothness of the water: we were able to carry our cutter in the davits as well as the dinghy. It also suited the motor, which proved of the greatest use, entirely redeeming its character, there is no doubt however, that to become accustomed to sailing is to be spoilt for any other method of progression. The photographers accomplished something, but the scenery scarcely lends itself to the camera and the light was seldom good. The water-colour scribbles with which I occupied myself serve their purpose as a personal diary.

We speculated from time to time whether these parts will ultimately turn into the "playground of South America," when that continent becomes densely populated after the manner of Europe, and amused ourselves by selecting sites for fashionable hotels: golf-courses no mortal power will ever make. On the whole the probability seems the other way, for the climate is against it; it is too near to the Antarctic to be warm even under the most favourable conditions, and the Andes will always intercept the rain-clouds of the Pacific. One of the survey-ships chronicled an average of eleven hours of rain in the twenty-four, all through the summer months. We ourselves were fortunate both in the time of year and in the weather. It resembled in our experience a cold and wet October at home; but there were few days, I cannot recall more than two, when we lost the greater part of the view through fog and rain. On the rare occasions

when it was sunny and clear the effect was disappointing, and less impressive than when the mountains were seen partially veiled in mist and with driving cloud. The last hundred miles before the Gulf of Peñas it became markedly warmer, and the steam-heating was no longer necessary.

It was far from our thoughts that exactly one year later these same channels would witness a game of deadly hide-and-seek in a great naval war between Germany and England. In them the German ship *Dresden* lay hidden, after making her escape from the battle of the Falkland Islands, while for two and a half months English ships looked for her in vain. They explored in the search more than 7,000 miles of waterway, not only taking the risks of these uncharted passages, but expecting round every corner to come upon the enemy with all her guns trained on the spot where they must appear.

We left Punta Arenas on Saturday, November 29th, 1913, spending the night in Freshwater Bay, and the next afternoon anchored in St. Nicholas Bay, which is on the mainland. Opposite to it, on the other side of the Straits, is Dawson Island, and separating Dawson from the next island to the westward is Magdalen Sound, which leads into Cockburn Channel; it was in this last that the *Dresden* found her first hiding-place after escaping from Sturdee's squadron and obtaining an illicit supply of coal at Punta Arenas. St. Nicholas Bay forms the mouth of a considerable river, the banks of which are clothed with forests which come down to the sea; near the estuary is a little island, and on it there is a conspicuous tree. Mr. Corry and I went out in the boat, and found affixed to the tree a number of boards with the names of vessels which had visited the place. Jeffery scrambled up and added *Mana's* card to those already there. This was our first introduction to a plan frequently encountered later in out-of-the-way holes and corners, and which subsequently played a part in the war. At the outbreak of hostilities the *Dresden* was in the Atlantic, and had to creep round the Horn to join the squadron of Von Spee in the Pacific. She put into Orange Bay, one of the furthest anchorages to the south; there she found that many months before the *Bremen* had left her name on a similar board. Moved by habit someone on the cruiser wrote below it "*Dresden*, September 11th, 1914"; then caution supervened, and the record was partially, but only partially, obliterated;

FIG. IC.

there it was shortly afterwards read by the British ships *Glasgow* and *Monmouth*, and formed a record of the proceedings of the enemy.

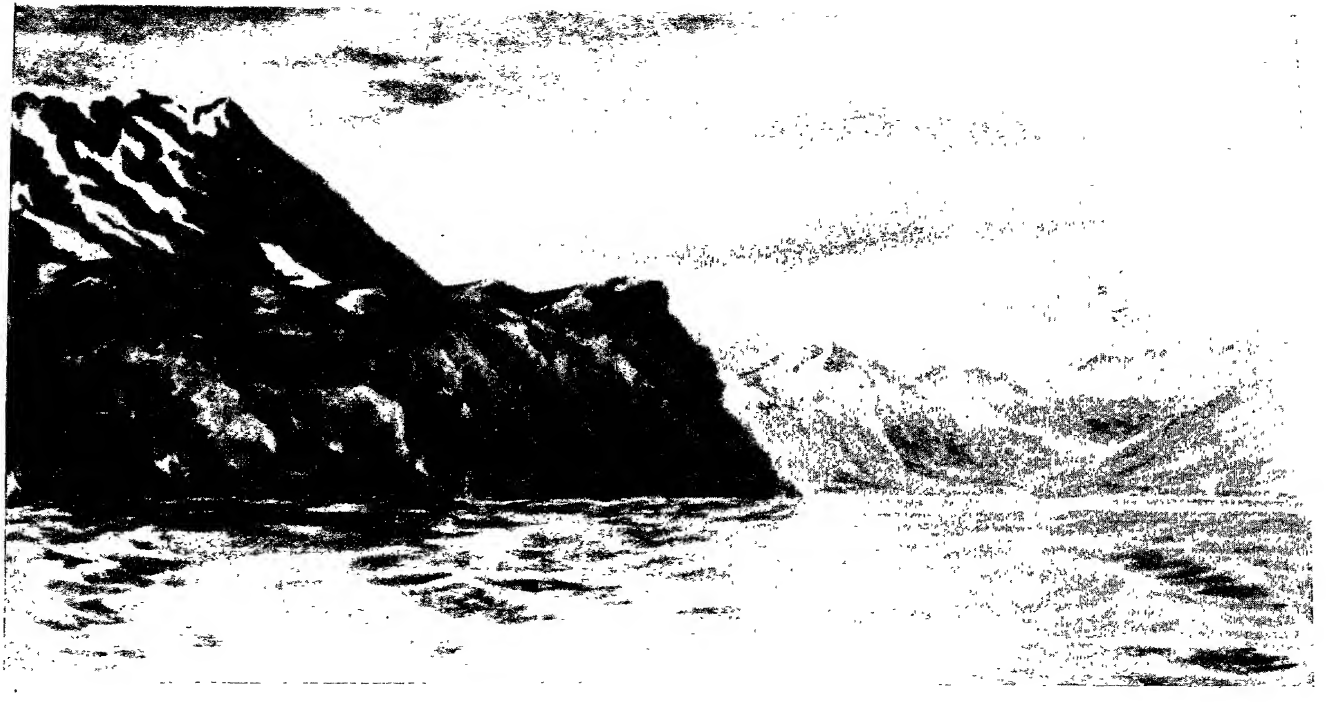
On Monday, December 1st, we started at daylight and made our way with motor and sail as far as Cape Froward, the most southerly point of the Straits; but the sea was running too high to proceed. We had to retrace our steps, and cast anchor again in St. Nicholas Bay. This time S. and I were determined to explore the river, so, after an early luncheon, in order to get the benefit of the tide, we made our way up it in the cutter. It was most pleasant rowing between the banks of the quiet stream, and so warm and sheltered that we might almost have imagined ourselves on the Cherwell, if the illusion had not been dispelled by the strange vegetation which overhung the banks, amongst which were beautiful flowering azaleas. Every here and there also a bend in the course of the river gave magnificent views of snow-clad peaks above. A happy little family of teal, father, mother, and children, disported themselves in the water. Later in the voyage, as the mountains grew steeper, we had many waterfalls, but never again a river which was navigable to any distance. Some of the crew had been left to cut firewood, and we found on our return that they had achieved a splendid collection, which Mr. Ritchie and Mr. Corry had kindly been helping to chop. Burning wood was not popular in the galley, but we were anxious to save our supplies of coal.

Tuesday, December 2nd, we again left the bay, and this time were more fortunate. It was misty and sunless, but as we rounded Cape Froward it stood out grandly, with its foot in grey seas and with driving clouds above. We had now definitely entered on the western half of the Straits and were amongst the spurs of the Andes. As the day advanced the wind freshened, the clouds were swept away, and blue sky appeared, while the sea suddenly became dark blue and covered with a mass of foaming, tumbling waves; on each coast the white-capped mountains came out clear and strong. This part of the channel, which is known as Froward Reach, is a path of water, about five miles wide, lying between rocky walls; and up this track *Mana* beat to windward, rushing along as if she thoroughly enjoyed it. Every few minutes came the call "Ready about, lee oh!" and over she went on a fresh tack, travelling perfectly steadily, but

listed over until the water bubbled beneath the bulwarks on the lee side. It would have been a poor heart indeed that did not rejoice, and every soul on board responded to the excitement and thrill of the motion: that experience alone was worth many hundred miles of travel. As evening came the wind sank, and we were glad of the prosaic motor to see us into our haven at Fortescue Bay.

The next day the wind was too strong to attempt to leave the harbour, and we went to bed with the gale still raging, but during the night it disappeared, and before dawn we were under way. As light and colour gradually stole into the dim landscape, the grey trunks and brown foliage of trees on the near mountain-sides gave the effect of the most lovely misty brown velvet. Rain and mist subsequently obscured the view, but it cleared happily as we turned into the harbour of Angosto on the southern side of the channel. Rounding the corner of a narrow entrance, we found ourselves in a perfect little basin about a quarter of a mile across, surrounded with steep cliffs some 300 feet in height, on one side of which a waterfall tore down from the snows above. Our geologist reported it as a glacier tarn, which, as the land gradually sank, had been invaded by the sea. We left it with regret at daylight next morning.

The Straits became now broader and the scenery was more bleak, the great grey masses being scarcely touched with vegetation till they reached the water's edge. It was decided to spend the night at Port Churruca in Desolation Island, rather than at Port Tamar on the mainland opposite, which is generally frequented by vessels on entering and leaving the Straits. We passed through the entrance into a rocky basin, but when we were at the narrowest part between precipitous cliffs the motor stopped. It had been frequently pointed out, when we were wrestling with the engine, how perilous would be our position if anything went wrong with it in narrow waters. I confess that I held my breath. S. disappeared into the engine-room, the Navigator's eyes were glued to the compass, and the Sailing-master gave orders to stand by the boats in case it was necessary to run out a kedge anchor and attach the yacht to the shore. It was a distinct relief when the throb of the motor was once more heard; the difficulty had arisen from the lowness of the temperature, which had interfered with the flow of the oil. The ship, how-



CAPE FROWARD, MAGELLAN STRAITS.

Looking East.

FIG. 12.

THE GLACIER GORGE, PORT CHURRUCA.

ever, was luckily well under control, with the wind at the moment behind her. In an inner basin soundings were taken, " twenty-five fathoms no bottom, thirty fathoms no bottom," till, when the bowsprit seemed almost touching the sheer wall of rock, the Nassau Anchorage was found and down went the hook.

We grew well acquainted with Churruca, as we were detained there for five days; Saturday through the overhauling of the engine; Sunday, Monday, and Tuesday by bad weather; of Wednesday more anon. The position was not without a certain eeriness: we lay in this remote niche in the mountains, while the storm raged in the channel without and in the peaks above; at night, after turning in, the gale could be heard tearing down from above in each direction in turn, and the vessel's chain rattling over the stony bottom as she swung round to meet it. The heavy rain turned every cliff-face into a multitude of waterfalls, which vanished at times into the air as a gust of wind caught the jet of water and converted it into a cloud of spray. Although the weather prevented our venturing outside, it was quite possible to explore the port by means of the ship's boats. It proved not unlike Angosto, but on a larger and more complicated scale. Beyond our inner anchorage, although invisible from it, was a further extension known as the Lobo Arm, and there were also other small creeks and inlets.

Even the prosaic Sailing Directions venture on the statement that the scenery at Port Churruca is "scarcely surpassed," and one of the fiords must be described, although the attempt seems almost profane. In its narrow portion it was about a mile in length and from 100 to 200 yards in width; the sheer cliffs on either hand were clothed to the height of many hundreds of feet with various forms of fern and most brilliant moss. Above this belt of colour was bleak crag, and higher again the snow-line. The gorge ended in a precipice, above which was a mountain-peak; a glacier descending from above had been arrested in its descent by the precipice and now stood above it, forming part of it, a sheer wall of ice and snow as if cut off by a giant knife. There was little life to be seen, but an occasional gleam was caught from the white breast of a sea-bird against the dark setting of the ravine. In one part, high up on the cliff, where the wind was deflected by a piece of overhanging rock, was a little colony of nests; the mother birds and young broods sat

on the edge in perfect shelter, even when to venture off it was to be beaten down on to the surface of the water by the strength of the wind. Some of our party visited the fiord on a second occasion to try to obtain photographs; it was blowing at the time a severe gale, and the effect was magical. The squalls, known as "williwaws," rushed down the ravine in such force that the powerful little launch was brought to a standstill. They lashed the water into waves, and then turned the foaming crests into spray, till the whole surface presented the aspect of a fiercely boiling cauldron, through which glimpses could be caught from time to time of the dark cliffs above.

While S. and I were visiting the glacier gorge, the two other members of the party were exploring the last portion of the inlet named on the chart the Lobo Arm. It terminated on low ground, on which stood the frame of an Indian hut, and pieces of timber had been laid down to form a portage for canoes. A few steps showed that the low ground extended only for some 160 yards, while beyond this was another piece of water which had the appearance of an inland lake, some three miles long and a mile wide. The portage end of the water was vaguely shown on the chart of Port Churruca, but there was no indication of anything of the kind on the general map of Desolation Island. Our curiosity was mildly excited, and we all visited the place; one of our number remarked that "the water was slightly salt," another that there "were tidal indications," a third that "from higher ground the valley seemed to go on indefinitely." At last the map was again and more seriously examined, and it was seen that, while there were no signs of this water, there were on the opposite side of the island the commencements of two inlets from the open sea, neither of which had been followed up: the more northerly of these was immediately opposite Port Churruca. "If," we all agreed, "our lake is not a lake at all, but a fiord"—and to this every appearance pointed—"it is in all probability the termination of this northern inlet, and Desolation Island is cut in two except for the small isthmus with the portage." Then a great ardour of exploration seized us, Mr. Corry fell a victim to it, Mr. Gillam fell likewise, and we refused to be depressed by Mr. Ritchie's dictum that it had "nothing to do with serious navigation." We wrestled with a conscientious conviction that it had certainly nothing to do with Easter Island,

and we ought to go forward at the earliest possible moment, but the exploration fever conquered. We discussed the possibility of getting the motor-launch over the portage, and were obliged reluctantly to abandon it as too heavy, but it was concluded that it would be quite feasible with the cutter.

The next day proved too wet to attempt anything, but Wednesday dawned reasonably fine, though with squalls at intervals. Great were the preparations, from compasses, note-books, and log-lines, to tinned beef and dry boots. At last at 11.30 (or 6.30 a.m. by true time) we sallied forth. The launch towed us down the Lobo Arm, and then came the work of passing the boat across the isthmus, at which all hands assisted. It was the prettiest sight imaginable; the portage, which had been cut through the thick forest undergrowth, had the appearance of a long and brilliant tunnel between the two waters, it was carpeted with bright moss and overhung by trees which were covered with lichen (fig. 13). The bottom was soft and boggy, and I at one time became so firmly embedded that I could not get out without assistance. In less than half an hour the boat was launched on the other side, and Mr. Corry, Mr. Gillam, our two selves, and two seamen set forth on our voyage. Soon after starting the creek divided, part going to the north-west and part to the south-east. We decided to follow the latter as apparently the main channel.

We rowed for an hour and a quarter, taking our rate of speed by the log. The mountains on each side were of granite, showing very distinct traces of ice action. At 2 p.m. we landed on the left bank for luncheon. It was, it must be admitted, a somewhat wet performance; the soaked wood proved too much even for our expert campers-out, who had been confident that they could make a fire under all circumstances, and had disdainfully declined my proffered thermos. Enthusiasm was, however, undamped. Mr. Corry ascended to high ground and discovered that there was another similar creek on the other side of the strip of ground on which we had landed, which converged towards that along which we were travelling. After rowing for an hour and a half we reached the point where the two creeks joined; here we landed and scrambled up through some brushwood to the top of a low eminence. Looking backwards we could see up both pieces of

water, while looking forward the two fiords, now one, passed at right angles, after some four miles, into a larger piece of water. This was where we had expected to find the open sea, and some distant blue mountains on the far horizon were somewhat of an enigma. As we had to row back against a head wind, it was useless to think of going further, unless we were prepared to camp out, so all we could do was to make as exact sketches as possible to work out at home.

The return journey was easier than had been expected, for the wind dropped; we kept this time to the right bank, and stopped for "tea" by some rocks, which added mussels to the repast for the taking. The portage was gained four hours after the time that the rest of the crew had been told to meet us there; and it was a relief to find that they had possessed their souls with patience. *Mana* was finally reached at 11 p.m. It was found by calculating the speed at which we had travelled and its direction, that our creek had led into the more southerly of the unsurveyed inlets, and not as we had expected into that to the northward. The distant blue hills were islands. Like all great explorers, from Christopher Columbus downwards, our results were therefore not precisely those we had looked for, but we had undoubtedly proved our contention that Desolation Island is in two halves, united only by the 160 yards covered by the portage on the Lobo Isthmus.

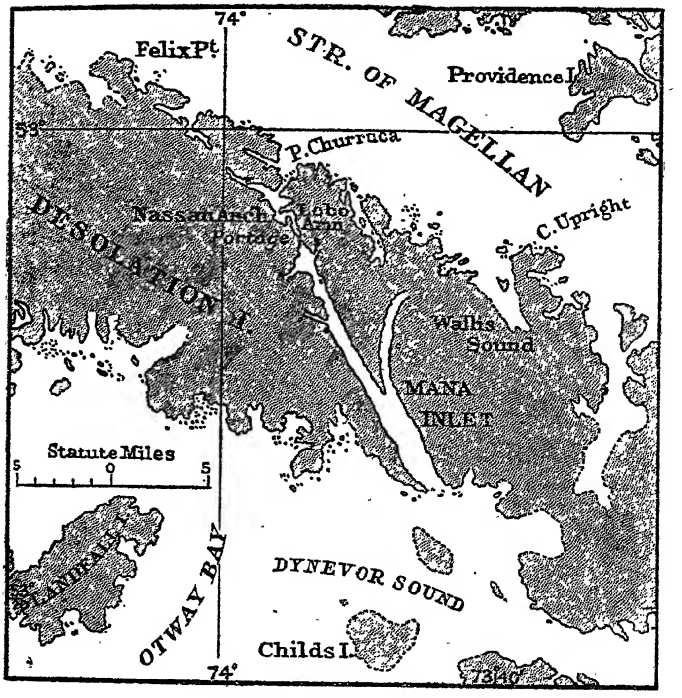
A knowledge of the existence of this channel, connecting the Pacific Ocean with the Magellan Straits, might be of high importance to the crew of a vessel lost to the south of Cape Pillar, when making for the entrance to the Straits. Instead of trying to round that Cape against wind at sea, her boats should run to the southward until the entrance to the inlet is reached; they can then enter the Magellan Straits without difficulty at Port Churruca. With the consent of the Royal Geographical Society, it has been christened "Mana Inlet."[1]

The next morning, December 1st, we left Churruca with a fair wind, so that the engine was only needed at the beginning and end of the day; but the weather was drizzling and unpleasant, so

[1] We were subsequently interested to learn from a private diary kept on board *The Challenger* that they had also taken their boat over into this water; they had, however, neither explored it nor marked it on the map.

that we could see little of Cape Pillar,[1] where the Magellan Straits enter the Pacific Ocean. Our own course was up the waterways between the western coast of Patagonia and the islands which lie off the coast. It is a route that is little taken, owing to the dangers of navigation. Not only is much of it uncharted and unsurveyed, but it is also unlighted, and its passage is

FIG. 13



MANA INLET.

excluded by the ordinary insurance terms of merchant ships; they consequently pass out at once into the open sea at Cape Pillar. We turned north at Smyth's Channel, the first of these

[1] Cape Pillar is the name which has been given to Magellan's "Cape Deseado" since the days of Sir John Narborough; it has two peaks, of which the western one is like a pillar. The point which on the chart is named Deseado lies two miles to the south-west and could not possibly have been seen by Magellan: see *Early Spanish Voyages and the Straits of Magellan*, edited by Sir C. Markham, Hakluyt Series II. vol. xxviii

waterways, and made such good progress that, instead of anchoring as we had intended at Burgoyne's Bay, we were able to reach Otter Bay. It is situated amid a mass of islands, and the sad vision of a ship with her back broken emphasised the need for caution. The general character of the Patagonian Channels is of the same nature as the Magellan Straits, but particularly beautiful views of the Andes are obtained to the eastward. The next day Mount Burney was an impressive spectacle, although only glimpses of the top could be obtained through fleeting mists; and the glistening heights of the Sarmiento Cordillera came out clear and strong. We anchored that night at Occasion Cove on Piazzi Island; and on Saturday, December 13th, had a twelve hours' run, using the engine all the way. Here there was a succession of comparatively monotonous hills and mountains, so absolutely rounded by ice action as to give the impression of apple dumplings made for giants. The lines show always, as would be expected, that the ice-flow has been from the south. Later a ravine on Esperanza Island was particularly remarkable; its mysterious windings, which it would have been a joy to explore, were alternately hidden by driving cloud or radiant with gleams of sun. Glimpses up Peel Inlet gave pleasant views, and two snowy peaks on Hanover Island, unnamed as usual, were absorbing our attention when we turned into Latitude Cove.

On December 14th the landscape was absolutely grey and colourless, so that Guia Narrows were not seen to advantage. Later the channel was wider and the possibility of sailing debated, but abandoned in view of the head wind. We had been struck with the absence of life and fewness of birds, but we now saw some albatrosses. In slacking away the anchor preparatory to letting go in Tom Bay, in a depth stated to be seventeen fathoms, it hit an uncharted rock at eleven fathoms. It was still raining as we left Tom Bay, but when we turned up Brassey Pass, which lies off the regular channel, the clouds began to lift, and Hastings Fiord and Charrua Bay were grand beyond description. From time to time the mists rose for an instant, and revealed the immediate presence of reach beyond reach of wooded precipices; or a dark summit appeared without warning, towering overhead at so great a height that, severed by cloud from its base, it seemed scarcely to belong to the earth.

FIG. 14.

CANOE CORDUROY PORTAGE BETWEEN PORT CHURRUCA AND MANA INLET.

FIG. 15.

PATAGONIAN WATERWAYS.

Showing water near the land smoothed by growing kelp.

Then as suddenly the whole panorama was cut off, and we were alone once more with a grey sea and sky.

As we approached Charrua, we caught sight among the trees on a neighbouring island of something which was both white and nebulous; it might, of course, be only an isolated wreath of mist, but after watching it for a while we came to the conclusion that it was undoubtedly a cloud of smoke. Our hopes of seeing Indians, which had grown faint, began to revive. As soon as we were anchored, orders were given that immediately after dinner the launch should be ready for us to inspect what we hoped might prove a camping-ground. This turned out to be unnecessary, as the neighbours made the first call. In an hour's time S. came to inform me that two canoes were approaching full of natives "just like the picture-books," whereon the anthropologists felt inclined to adapt the words of the immortal Snark-hunters and exclaim:

> "We have sailed many weeks, we have sailed many days,
> Seven days to the week I allow,
> But an Indian on whom we might lovingly gaze
> We have never beheld until now."

The crew, however, were fully convinced that the hour had arrived when they would have to defend themselves against ferocious savages. They had been carefully primed in every detail by disciples of Ananias at Buenos Aires, and by the blood-curdling accounts of a certain mariner named Slocum, who claimed to have sailed the Straits single-handed and to have protected himself from native onslaught by means of tin-tacks sprinkled on the deck of his ship. The canoes were about 23 feet in length, with beam of 4 to 6 feet and a depth of 2 feet. Six Indians were in one and seven in the other; all were young with the exception of one older man, and each boat contained a mother and baby. Their skins were a dark olive, which was relieved in the case of the women and children by a beautiful tinge of pink in the cheeks, and they had very good teeth. Their hair was long and straight, and a fillet was habitually worn round the brow; the top was cut *à la brosse*, giving the impression of a monk's tonsure which had been allowed to grow. The height of the men was about 5 feet 4 inches. Most of the party were clad in old European garments, but a few wore capes of

skins, and some seemed still more at home in a state of nature. They had brought nothing for sale, but begged for biscuits and old clothes. I parted with a wrench from a useful piece of calico, in the interests of one of the infants, which was still in its primitive condition; it was accepted, but with a howl of derision, which I humbly felt was well merited when it was seen that the rival baby was already wrapped in an old waistcoat given by the cook. One of the Indians talked a little Spanish, and was understood to say he was a Christian.

After dealing with them for a while we offered to tow them home, an offer readily understood, and accepted without hesitation. It was a strange procession amid weird surroundings; the sun had shown signs of coming out, but had thought better of it and retreated, and we made our way over a grey sea, between half-obscure cliffs in drizzling rain, taking keen note of our route for fear of losing our way back. Truly we seemed to have reached the uttermost ends of the earth. The lead was taken by that recent product of civilisation a motor-launch, containing our two selves and our Glasgow socialist engineer; then at the end of a rope came the dinghy, to be used for landing, the broad back of one of our Devonshire seamen making a marked object as he stood up in it to superintend the towing of the craft behind. The two canoes followed, full of these most primitive specimens of humanity, while the rear was brought up by a seal, which swam after us for a mile or so, putting up its head at intervals to gaze curiously at the scene. S. had brought his gun, and as we approached the camp thought it well to shoot a sea-bird, for the double reason of showing that he was armed and giving a present to our new friends. The encampment was situated in a little cove, and nothing could have been more picturesque. In front was a shingly beach, on which the two canoes were presently drawn up, flanked by low rocks covered with bright seaweed. In the background was a mass of trees, shrubs, and creepers, which almost concealed two wigwams, from one of which had issued the smoke which attracted our notice (fig. 16).

We returned next morning to photograph and study the scene. The size of the shelters, or tents, was about 12 feet by 9 feet, with a height of some 5 feet. They were formed by a framework of rods set up in oval form, the tops of which were brought together and interwoven, and strengthened by rods laid

horizontally and tied in place: the opening was at the side and towards the sea. Over this structure seals' skins were thrown, which kept in place by their own weight, as the encampments are always made in sheltered positions in dense forests. With the exception that they do not possess a ridge-pole, the tents, which are always the same in size and make, closely resemble those of English gipsies, the skins taking the place of the blankets used by those people. No attempt was made to level the floor, the fire was in the middle, and in one the sole occupant was a naked sprawling baby, who occupied the place of honour on the floor beside it. In some of the old encampments, which we saw subsequently, there were as many as six huts, but it was doubtful if they had all been occupied at the same time. The middens are outside and generally near the door. Some of the Indians were quite friendly, but others were not very cordial, the old women in particular making it clear to the men of the party that their presence was not welcome. The old man, whose picture appears (fig. 17), was apparently the patriarch of the party, and quite amiable, though he firmly declined to part with his symbol of authority in the shape of his club; in order to keep him quiet while his photograph was taken he was fed on biscuits, which he was taught to catch after the manner of a pet dog. The staff of life is mussels and limpets, and we saw in addition small quantities of berries. A lump of seal fat weighing perhaps 10 lb. was being gnawed like an apple, and a portion was offered to our party. The dogs are smooth-haired black-and-tan terriers, like small heavy lurchers; they are, it is said, taught to assist their masters in the catching of fish.[1]

The company presently showed signs of unusual activity, and began to shift camp; the movement was not connected, as far as we could tell, with our presence, and, judging by the odour of the place, the time for it had certainly arrived. It was interesting to see their chattels brought down one by one to the canoes. Amongst them were receptacles resembling large pill-boxes, about 12 inches across, made of birchwood, which was split thin and sewn with tendons. In these were kept running nooses made of whalebone for capturing wild geese, and also

[1] "The Indians had taught their dogs to drive the fish into a corner of some pond or lake, from whence they were easily taken out by the skill and address of these savages."—*Narrative of Hon. J. Byron*, ed. 1768, p. 56.

harpoon-lines cut out of sealskin: at one extremity of these last was a barbed head made of bone; this head, when in use, fits into the extremity of a long wooden shaft, to which it is then attached by the leather thong. The possessions included an adze-like tool for making canoes, the use of which was demonstrated, and resembled that of a plane; also an awl about 2 inches long, in form like a dumb-bell, with a protruding spike at one end. There were small pots made of birch bark for baling the boats, and some European axes. We did not see any form of cooking utensil. When all the objects, including the sealskin coverings of the huts, had been stowed in the canoes, the company all embarked and rowed off towards the open sea.

On leaving Charrua and returning to the main channel we obtained magnificent views of the Andes. Penguin Inlet leading inland opened up a marvellous panorama of snowy peaks, which can be visible only on a clear day such as we were fortunate in possessing; this range received at least one vote, in the final comparing of notes, as to the most beautiful thing seen between Punta Arenas and the Gulf of Peñas. A white line across the water showed where the ice terminated, while small pieces which reached the main channel, looked, as they floated past us, like stray waterlilies on the surface of the sea. We anchored at Ring Dove Inlet, and went on next day through Chasm Reach, where the channel is only from five hundred to a thousand yards in width. Our expectations, which had been greatly raised, were on the whole disappointed, but here again no doubt it was a question of lighting; the usually gloomy gorge was illuminated with the full radiance of the summer sun, leaving nothing to the imagination.

Chasm Reach leads into Indian Reach, in which sea, mountain, and sky formed a perfect harmony in varying shades of blue, with touches of white from high snow-clad peaks. Suddenly, in the middle of this vista, as if made to fit into the scene, appeared a dark Indian canoe with its living freight, evidently making for the vessel. We stopped the engine, threw them a line, and towed them to our anchorage in Eden Harbour. The weather had suddenly become much warmer, and the thermometer in the saloon had now risen to the comfortable but scarcely excessive height of 64°; the crew of the canoe, however, were so overcome with the heat that they spent the time pouring

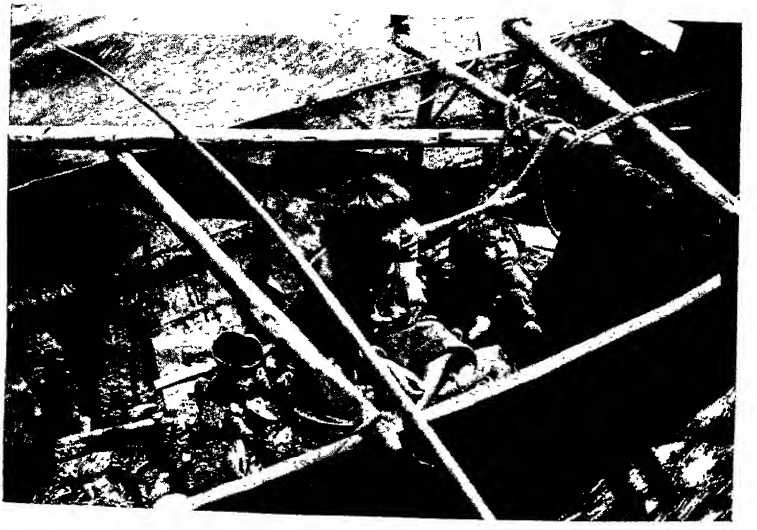
FIG. 16.

ENCAMPMENT OF PATAGONIAN INDIANS, BRASSEY PASS. *From sketch and photos.*

FIG. 17.

INDIANS OF BRASSEY PASS.

FIG. 18.



CANOE IN INDIAN REACH.

WITH A PREHISTORIC PEOPLE

(The Akikúyu of British East Africa)

BEING SOME ACCOUNT OF THE METHOD OF LIFE AND MODE OF THOUGHT FOUND EXISTENT AMONGST A NATION ON ITS FIRST CONTACT WITH EUROPEAN CIVILIZATION

BY

W. SCORESBY ROUTLEDGE, M.A. (Oxon)
and KATHERINE ROUTLEDGE (born Pease)
Som. Coll. (Oxon); M.A. (Trin. Coll., Dublin)

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what must have been very chilly sea-water over their naked bodies.[1]

The party was conducted by two young men; a very old woman without a stitch of clothing crouched in the bow; while in the middle of the boat, in the midst of ashes, mussel-shells, and other débris, a charming girl mother sat in graceful attitude. She was, perhaps, seventeen, and wore an old coat draped round her waist, while her baby, of some eighteen months, in the attire of nature, occupied itself from time to time in trying to stand on its ten toes. A younger girl of about fourteen sat demurely in the stern with her folded arms resting on a paddle which lay athwart the canoe, beneath which two shapely little brown legs were just visible. Her rich colouring, and the faded green drapery which she wore, made against the dark background of the canoe a perfect study for an artist, but the moment an attempt was made to photograph her she hid her face in her hands. The party was completed by a couple of dogs and a family of fat tan puppies, who were held up from time to time, but whether for our admiration or purchase was not evident.

The belongings were similar to those seen at the encampment and there were also baskets on board. The young mother had a necklace which looked like a charm, and therefore particularly excited our desires: in response to our gestures she handed to us a similar one worn by the baby, which was duly paid for in matches. When we were still unsatisfied she beckoned to the young girl to sell hers, but stuck steadfastly to her own, till finally a mixed bribe of matches and biscuits proved too much, and the cherished ornament passed into our keeping. The young men readily came on deck of the yacht, but the women were obviously frightened, and kept saying *mala, mala* in spite of our efforts to reassure them. After we had cast anchor, the party went with our crew to show them the best spot in which to shoot the net, and on their return ran up the square sail of their canoe, the halyard passing over a mast like a small clothes-prop with a Y-shaped extremity, got out their paddles, and vanished down-stream.

[1] "We were well clothed, and though sitting close to the fire were far from too warm; yet these naked savages (Fuegians), though further off, were observed, to our great surprise, to be streaming with perspiration."—*Voyage of H.M.S. "Beagle"* (Darwin), ed. 1870, p. 220.

At Eden Harbour a wreck was lying in mid-stream, where she had evidently struck on an uncharted rock when trying to enter the bay, a danger from which no possible foresight can guard those who go down to the sea in ships. English Narrows, which was next reached, is considered the most difficult piece of navigation in the channels: a small island lies in the middle of the fairway, leaving only a narrow passage on either side, down which, under certain conditions, the tide runs at a terrific rate. It was exciting, as the yacht approached her course between the island and opposing cliff which are separated by only some 360 yards, to hear Mr. Ritchie ask Mr. Gillam to take the helm himself, and the latter give the order to "stand by the anchor" in case of mishap; but we had hit it off correctly at slack water and got through without difficulty. From there our route passed through Messier Channel, which has all the appearance of a broad processional avenue, out of which we presently turned to the right and found ourselves in Connor Cove. The harbour terminates in a precipitous gorge, down which a little river makes its way into the inlet. We endeavoured to row up it, but could not get further than 100 or 200 yards; even that distance was achieved with difficulty, owing to the number of fallen trees which lay picturesquely across the stream.

The plant life, which had always been most beautiful, became even more glorious with the rather milder climate, which we had now reached. When the trees were stunted it was from lack of soil, not from atmospheric conditions. Tree-ferns abounded, and flowering plants wandered up moss-grown stems; among the most beautiful of these blooms were one with a red bell and another one which almost resembled a snowdrop.[1] The impression of the luxuriant *mêlé* was rather that of a tropical forest than of an almost Antarctic world, while the intrusion of rocks and falling water added peculiar charm. Butterflies were seen occasionally, and sometimes humming-birds.

Since our detention at Churruca we had been favoured with unvarying good fortune, and the crew were beginning to say that thirteen, which we had counted on board since Mr. Corry joined us, was proving our lucky number. Now, however, our fate changed; twice did we set forth from this harbour only to be

[1] *Philesia buxifolia* and *Luzuriaga erecta*.

obliged to return and start afresh, till we began to feel that getting under way from Connor Cove was rapidly becoming a habit. On the first occasion the weather became so thick that in the opinion of our Navigator it was not safe to proceed: the second time the wind was against us. We tried both engine and sails, but though we could make a certain amount of headway under either it was obviously impossible, at the rate of progression, to reach the next haven before nightfall; when, therefore, we were already half-way to our goal we once more found it necessary to turn round. It was peculiarly tantalising to reflect that there were, in all probability, numerous little creeks on the way in which we could have sheltered for the night, but as none of them had been surveyed there was no alternative but to go back to our previous anchorage. Residence there had the redeeming point that it proved an excellent fishing-ground. On each of the three nights the trammel was shot at a short distance from the spot where the stream entered the bay, and we obtained in all some 200 mullet. They formed an acceptable change of diet, and those not immediately needed were salted. From that time till we left the channels we were never without fresh fish, catching, in addition to mullet, bream, gurnet, and a kind of whiting; they formed part of the menu at every meal, till the more ribald persons suggested that they themselves would shortly begin to swim.

Our third effort to leave Connor Cove was crowned with greater success, and we safely reached Island Harbour, which, as its name suggests, is sheltered by outlying islands. This bay and the neighbouring anchorage of Hale Cove are the last two havens in the channels before the Gulf of Peñas is reached, and in either of them a vessel can lie with comfort and await suitable weather for putting out to sea. It is essential for a sailing vessel to obtain a fair wind, for not only has she to clear the gulf, but must, for the sake of safety, put 200 miles between herself and the land; otherwise, should a westerly gale arise, she might be driven back on to the inhospitable Patagonian coast. In Island Harbour we filled our tanks, adorned the ship for'ard with drying clothes and fish, and for three days waited in readiness to set forth. At the end of that time it was still impossible to leave the channels, but we decided to move on the short distance to Hale Cove, which we

reached on December 24th. Christmas Eve was spent by three of our party, Mr. Ritchie, Mr. Corry, and Mr. Gillam, on a small rock "taking stars" till 2 a.m. The rock, which had been selected at low tide, grew by degrees unexpectedly small, and to keep carefully balanced on a diminishing platform out of reach of the rising water, while at the same time being continuously bitten by insects, was, they ruefully felt, to make scientific observations under difficulties. On Christmas Day it poured without intermission, but it was a peaceful if not an exciting day. It is, I believe, the correct thing to give the menu on these occasions: the following was ours.

SCHOONER YACHT *MANA*, R.C.C.

CHRISTMAS DAY, 1913.

Potages aux légumes à l'Anglais.
Mulets d'eaux Patagonia.
Bœuf rôti d'Argentine. Pommes de terre de Punta Arenas.
Petits Pois à l'Angleterre.
Pouding Noël de Army & Navy Stores, garni "Holly Antarctic."
Fromage Gouda, Beurre, Pain de Mana, Biscuits Matelote.
Bonbons Peppermint à la School-girl.
Café de Rio de Janeiro.

The forecastle was visited after dinner and each man given a half-pound tin of tobacco. Boxing Day was comparatively fine, and a laundry was organised on shore with great success; a fire was made, old kerosene tins turned into boilers, and the articles washed in camp-baths with water from a streamlet. It is one thing, however, to wet clothes in the Patagonian Channels; it is quite another to dry them. For days afterwards the rain descended in torrents, while the wind blew persistently from the north-west; with one short intermission we lay in Hale Cove weather-bound for thirteen days, till, as some one remarked, "it was a pity that we had not given it as a postal address." It was tiresome of course, but an interval of rest for all on board after the strenuous passage of the channels was not without advantage; for ourselves journals were written up, flowers pressed, and photographs developed.

Hale Cove was fortunately one of those few ports in which it was possible to get a little exercise, which the denseness of the undergrowth generally rendered impossible. The cliffs, at the foot of which *Mana* lay, were precipitous and clothed with

vegetation to the sky-line, they thus scarcely lent themselves to exploration. There was, however, across the small bay a southern spur, on the top of which for some reason trees had not flourished and which was comparatively clear; this it was possible to reach by landing on a little beach and scrambling along an old track which had been cut through an intermediate belt of wood. We could in this way get some sort of a walk, at the cost of course of becoming soaked through from bogs and dripping vegetation.

Not far from the cove there were traces of a small frame house, and near it flourished European wheat and grass, which had obviously taken root from stray seed. Its history was difficult to guess. Why had a white man lived there, and on what had he subsisted? The only solution suggested was that it might at one time have been a port of call for a line of steamers, and a woodman had been employed to cut fuel. Another dwelling, but made of material found on the spot, had obviously been destroyed by fire, and on its abandoned site native wigwams had been erected. The place was evidently the resort of Indians; when, therefore, we noted near the old track, and not far from the water-course, part of two rough boards protruding from the earth, we hoped that we had chanced on an Indian burial-ground, which would naturally have been of much anthropological interest. The soil which had originally covered the boards had been partially washed away by the rain, and on moving them we found, as had been guessed, that just below were human bones; they were so deeply encrusted with roots and earth that it was only by much digging with our fingers we could get them out at all. Then they proved to be in much confusion, two parts of the skull even were in different places, and it was difficult at first to say whether the body, which was that of a man in middle life, had been buried full length or in the folded attitude so common among primitive peoples. It was my first experience in scientific body-snatching, a proceeding to which later I became fairly well inured, and it felt not a little weird being thus in contact with the dead in his lonely resting-place. A great tree-fern kept guard over the grave on one side, a gnarled trunk bent over it from the other, and the sun gleamed at intervals through the thick branches of surrounding cedars. At last it became obvious that the body had been outstretched, and the grave lined as well

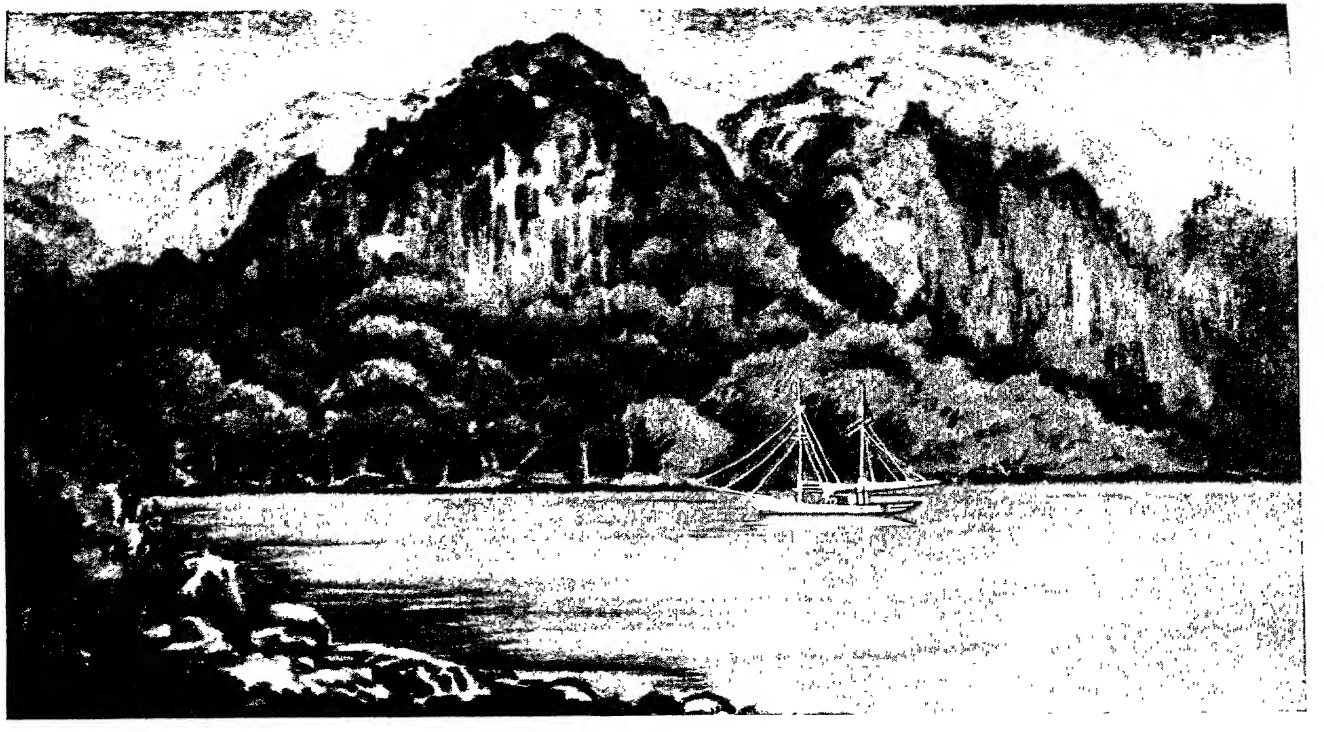
as covered with boards, in addition to which there had been a wrapping of some woven material; it seemed therefore evident that the corpse had been that of a civilised man. Who was he? the lumberman, the remains of whose hut we had seen? one of the crew of some vessel which had put in here? or possibly a ship-wrecked mariner? for there were traces of an ill-fated vessel in a quantity of coal washed up on the beach. Why, though he had been buried with considerable care, was the grave so shallow, and why had it been left unmarked? We buried him again reverently, and though he was very possibly an unpleasant person when alive, the thoughts of one of us at least, who is naturally mid-Victorian, turned to the mother who had once borne and tended him somewhere and who could so little have pictured where he would lie.

> "One midst the forest of the west
> By a dark stream is laid;
> The Indian knows his place of rest,
> Far in the cedar shade."
>
> MRS. HEMANS.

We discussed marking the spot, but came to the conclusion that the best way to prevent its again being disturbed was to obliterate all traces of it; so there the nameless man rests on in his hidden grave.

The wind still being contrary, charts and sailing directions were ransacked for change of scene, and on New Year's Eve we shifted our quarters, proceeding up Krüger Channel, and anchoring in a little cove called after De Wet: as Joubert was also in the neighbourhood, officials of the Chilean Government who had surveyed the district had apparently been of pro-Boer sympathies. On January 1st, 1914, we went out into the Gulf of Peñas, only to find that it was useless to attempt to put to sea, and we returned again to Hale Cove. The *Challenger* had, we found, anchored in the same spot on New Year's Day, 1876. During the next few days Mr. Ritchie, with the help of Mr. Corry, occupied himself at my husband's request in surveying a small cove as a possible anchorage for lesser craft.

A shooting expedition also took place after kelp-geese, which are large birds about the size of Aylesbury ducks. When cruising in the launch we saw at some distance a couple of them swimming in the sea; we circled round them in the endeavour to get a shot, till we were about a hundred yards



HALE COVE.

distant, when they took the alarm and made off. They are unable to fly, but when, as in this case, they anticipate danger scuttle along on the top of the water, lashing it up with their webbed feet. The surface was smooth as a mirror, and the boat went about seven miles an hour, but for some two miles we were unable to overhaul them. Presently they dived and separated, and on their reappearance we continued to follow one of them. During the whole of the pursuit, whenever the wobbling of the boat and the antics of the bird permitted the fore and back sights to be brought in line, a ·275 mauser bullet was sent somewhere in the neighbourhood of the fleeing object. The goose apparently came to the conclusion that the white launch, with its spluttering motor, was a peculiarly formidable sea-beast, and the safest place would be on land; he therefore went on shore, climbed up some rocks, and looked at it; a bullet between his feet, however, unsettled his mind on the subject, and he once more took to the water, where he finally met his doom. Light, who happened to be with us, witnessed the chase with intense delight, and constantly referred to it afterwards as the most exciting recollection of the voyage. As was not astonishing in the case of such an athletic bird, no part of him proved to be eatable except his liver, which was excellent.[1]

On Tuesday, January 6th, we at last got our favourable wind and said good-bye to Hale Cove. It is the usual resort for vessels entering and leaving the channels, but we had lain there for nearly a fortnight in the height of the season without seeing a trace of a ship, a fact which shows how little these waterways are frequented. As we passed out of the Gulf of Peñas we gazed with interest on the unfriendly and barren peaks of Wager Island, where Anson's store-ship of that name was lost on May 14th, 1740, after the squadron had rounded the Horn. The members of the crew who survived the wreck, one hundred and forty-five in number, were there for five months, at the end of which time they had been reduced by about one-third, chiefly through starvation. Seventy or eighty of the remainder then took to the longboat and cutter, of whom thirty finally reached the coast of Brazil via

[1] "Among the birds we generally shot was a bird much larger than a goose, which we called the Racehorse, from the velocity with which it moved upon the surface of the water in a sort of half-flying, half-running motion."—*The Narrative of the Hon. John Byron*, ed. 1768, p. 50.

the Magellan Straits. The rest of the survivors, a party of twenty, including the captain and an officer named Byron, a great-uncle of the poet, made their way northward, and through the aid of Indians four of them managed to reach the Spanish settlements in Chile. The graphic account given by Byron of their surroundings on the island would be equally applicable to-day, and has already been quoted in these pages.

CHAPTER VI

CHILE

Refitting at Talcahuano—Trip to Santiago and across the Summit of the Andes—Valparaiso—To Juan Fernandez—Typhoid on Board—Back to Chile—Juan Fernandez again.

The principal Spanish colonies in South America were, as has been seen, on the western side of the continent. Balbao crossed the isthmus of Panama in 1513. In 1531 Pizarro landed in Peru, where he encountered and overthrew the empire of the Incas. Valdivia, one of his ablest lieutenants, made his way still further south, and in 1541 founded Santiago, the present capital of Chile, on the fruitful plain between the Andes and the sea. His further progress was checked by the Araucanians, a warlike tribe of Indians, who offered a much stronger resistance than the Incas. They were never entirely conquered, and the Spaniards in Chile were engaged in perpetual struggle with them, while at the same time open to attacks on the coast from European powers who were at enmity with Spain. When the revolutionary waves swept the continent the Chilean patriots were at first compelled to withdraw across the Andes. The most famous of them was Bernardo O'Higgins; his father, originally a bare-footed Irish boy, was one of the last viceroys of Peru, and the son became one of the first presidents of the new republic. Argentina had at this time accomplished her own freedom, and was able to send help to Chile. General San Martin crossed the Andes, and inflicted a crushing defeat on the Spaniards at Maipu in 1818. The revolutionary army then passed north, the Viceroy evacuated Lima, and at Guayaquil San Martin met the liberator Bolivar, who had marched down from the north. Meanwhile Admiral Cochrane, who had reorganised the Chilean and Peruvian navies, had been engaged in freeing the Pacific from Spanish ships. South America thus was finally cleared from the domination of the Spaniard.

Disputes, however, arose between the new republics as to their respective boundaries: Chile fought Peru in 1879 over the possession of the nitrate-fields, and issued victorious from the struggle. The long series of difficulties between Chile and Argentina was ended, as has been recorded, through British arbitration, in 1902.

It is hard not to believe that the "roaring forties" have a personality: a polytheist who goes thither in ships ought to sacrifice to the spirit of that unquiet belt. As soon as we had passed the magic limit of degrees the weather changed and

became beautifully balmy, and the rest of our passage was excellent. When we again came in sight of land it was in strong contrast to that which we had left, being brown, dried up, and somewhat low: all visions of snow-clad Andes had disappeared; neither here nor at Talcahuano was anything to be seen that could justify the name of a coast range. Talcahuano, the Chilean naval port, stands on a magnificently sheltered bay and was an ideal spot for our purpose of refitting. It is much to be preferred, from the shipping point of view, to the bay of Valparaiso, some 260 miles further up the coast, which lies exposed to the northerly winds and is crowded with shipping. Through the kindness of Mr. Edwards, the Chilean minister in London, a naval order had been promulgated some time before our arrival giving instructions that the Expedition was to be afforded all facilities. We accordingly met with every courtesy, and the yacht was almost at once placed in the floating dock to allow of the examination of her bottom, an essential proceeding, as it had not been overlooked, except by a diver at Punta Arenas, since we left England, now nearly twelve months ago. A floating dock consists of a huge tray, with an enormous tank on either side; when these tanks are filled with water the dock sinks, and the vessel floats on to the tray, being supported against its sides, the tanks are then emptied, and the tray rises, bearing the vessel clear out of the water; when the work is completed the process is reversed and the ship floats out once more.

After this overhauling, which took four days, came the work of examining and restowing the hold; this was expedited by all the contents being taken out and placed in a lighter alongside. It was the work of the Stewardess to check the stores in hand, and also those contained in ninety-five new packages from England which we found awaiting our arrival. On the representation of our Legation at Santiago, the Government had done us the favour to remit all duties on them except 5 per cent., which it would have required a special Act of Parliament to repeal. As some goods pay as much as 55 per cent. in customs we were greatly the gainers, in spite of the fact that an illicit levy had been taken of our butter and jam, which are among the most heavily taxed articles, to an amount equivalent to a supply of some weeks for the saloon party. We were happily able to make good the deficiency, which would otherwise have been

somewhat maddening, by purchases of honey, which all down this part of the coast is good and cheap. Jam is ruinously expensive, if procurable at all, and our sympathy was extended to the skipper of an English merchant ship in the bay, whose stock was finished, but whose crew were in no way inclined to waive their Board of Trade rights, for Jack thinks potted strawberries and damsons quite as essential an article of diet as does Tommy. Our loss was less annoying, if also less amusing, than that of the owners of a lighter which was lying just outside the custom-house, and which was forcibly despoiled during the night. The thieves turned out to be the guards set by the custom-house, who apparently thinking the hours of darkness long had contrived thus to pass the time. We told this story to one of the inhabitants of another South American port. "Ah, yes," he said drily, "the custom-house here has now a bright electric light; it makes it easier for them to take out the nails without hurting their fingers."

We were now nearing the end of our outward voyage, and the provisions had to be divided between the respective sea and land parties. Easter Island affords no good anchorage, and our plan was that the yacht, after disembarking the scientific members and waiting awhile off the coast, should return to Talcahuano under charge of Mr. Gillam, to collect letters and goods and then come out again to the island. The stores, therefore, had to be divided into four lots, with much arithmetical calculation: firstly, the portion needed by the whole Expedition for the voyage out, which was expected to last about a month; secondly, that for the shore party for a period of six months; thirdly, a share for the crew alone for four months; and, fourthly, the remainder which was to be left at Talcahuano and gathered up later. The island allotment was the most difficult, as we had only a general idea of what it would be possible to procure on shore.

It was altogether, as will be seen, a considerable work, and we were hard at it for a fortnight, during which time, with the exception of two shopping expeditions to the neighbouring city of Concepcion, we had little opportunity to see the surrounding country. It felt at any rate dry and warm, in fact well aired, after the damp of the Patagonian Channels, and might have been even adjudged too dry and dusty. The most refreshing sight

was a little garden which adjoined the custom-house steps, at which we landed almost daily, and which, in spite of difficulties, was invariably bright with geraniums and other flowers: Chile is much more a country of gardens, in the English sense, than any other land it has been my lot to visit. Talcahuano has about 13,000 inhabitants, and consists of little beside the dockyard, in which the chief posts are filled by Englishmen. Three English officers are also lent in peace time by our own navy to that of Chile; one of these, with whom we happened to have mutual acquaintances, was kind enough to entertain us on board the Chilean warship, whose name, being translated, was *Commander Pratt.*

A point anxiously debated at the moment, and not without some practical interest for us, was whether Chile could afford to keep the Dreadnoughts which were being built for her by Messrs. Armstrong. There was a financial crisis at the time, and the exchange was much against Chile; hence firms there which owed money to England were delaying meeting their liabilities, with the result that more than one English company had failed in consequence. The sale of a Dreadnought would of course greatly affect the rate; even without that before we left the country it had materially risen, and the value received for a sovereign was, from our point of view, regrettably diminished.

An Englishman feels distinctly more at home in Chile than in either Brazil or Argentina. Some of the best-known firms are genuinely English, though the possession of an English name is in itself no guarantee of more than a remote British origin: a Mr. Brown may, for instance, marry a Miss Thompson, and neither be able to speak the English tongue.[1] Our language is the only one taught free in the schools; it is presumably the most useful from the point of view of trade with ourselves and the United States. One of our countrymen resident in the Republic explained to us that "the Chileans hate all foreigners, but they hate the British rather less than the others." Those at least were our recorded impressions at this time; on the subsequent visit of the yacht, after war broke out, the German influence was strong enough to affect her position adversely in the way of work and stores.

[1] Some of the Chileans with British names are said to be descended from the officers and men under command of Lord Cochrane.

At last the provision lists were finished and we felt entitled to take a holiday, leaving the remainder of the work on the ship in the competent hands of Mr. Gillam; our special objects were to see the Easter Island collection in the museum at Santiago and get a glimpse of the Trans-Andine Railway. This part of our journeyings has nothing to do with the voyage of the *Mana*, and accounts of the ground covered have been given by much abler hands, notably by Lord Bryce in his *Impressions of South America*; it shall therefore be told in outline only. We left Talcahuano by the tri-weekly day express for Santiago; it took twelve hours to travel about 350 miles, but the Pullman car was luxurious, and we were able to see the country well. The line passes northward through the long fruitful plain between the Andes and the coast range, which constitutes the land of Chile, and crosses continually the streams which traverse it on their course from the mountains to the sea. The train stops from time to time at cheerful little towns, and finally at Santiago, which is a most attractive city, with a sense of quiet and yet cheerful dignity. There are but few streets at the end of which it is not possible to obtain a glimpse of the surrounding mountains, but they were scarcely either as near or impressive as descriptions had led us to expect.

The first night of our residence in the capital we experienced an earthquake. I was already asleep when about 10.30 I was awakened by the shock; the light when turned on showed the chandeliers and pictures swinging in opposite directions, and one of the latter was still oscillating when the current was switched off eight or ten minutes later. There was a slighter recurrence at 3 a.m. The shock was stated to be the worst since the great earthquake of 1906, and numbers of people had, we found, rushed out into the streets and squares. It was generally agreed that familiarity in the case of earthquakes breeds not contempt but the reverse, and that shocks of which the new-comer thinks but little, fill those who know their possibilities with nervous alarm. In this case no great damage was done; the only fatalities occurred at Talca, a little place about half-way along the line by which we had come. When we called at the Legation the next day to express our thanks to the British Minister for the trouble taken about our stores, we were shown the cracks in the walls which were the result of the previous earthquake and the fresh

additions made to them the night before. We had the good fortune at Santiago to become acquainted with Sir Edward and Lady Grogan. Sir Edward filled the post of military attaché for six of our South American legations, and I had heard at Buenos Aires much of the work and interests of Lady Grogan. She was the almost last Englishwoman whom I met till my return to my native land two years later, when I had the pleasure of renewing the acquaintance this time in Cromwell Road in proximity to numerous bales for Serbian refugees. We visited the Museum of Antiquities, where we found the objects from Easter Island of which we were in search; and the beautiful new Museum of Fine Arts, which also contains articles from the island.

We left Santiago at noon on Saturday, January 31st, the line at first continuing northwards. The country through which we passed looked rainless and barren, and the journey was hot and tiring. The train was crowded with Saturday travellers, and purveyors of drinks and ices continually pushed their way down it, apparently finding a ready market for their wares. At the junction of Llay-Llay, the line which comes from Santiago on the south connects with that from Valparaiso on the west, and branches off also eastward over the Andes to the Argentine. Here on the platform sat rows of women with some of the delightful fruit in which Chile abounds: grapes can be bought at 5*d*. a pound and peaches and nectarines at 8*d*. or 9*d*. a dozen. The drawback, however, in the case of the two last mentioned, is that, partly owing to the exigencies of packing, the Chileans make a point of gathering and also eating them quite hard and flavourless. The conscientious British matron can scarcely see without distress children of the more prosperous classes, as young as five or six years, concluding a heavy evening meal at eight or half-past, by eating entirely unripe peaches. She ceases to wonder that infant mortality in Chile is said to be heavy.

At Llay-Llay we took the easterly line, which ascends a valley full of prosperous cultivation, till it reaches the little town of Los Andes, where the Chilean state railway ends and the Trans-Andine service begins. The two ends of this railway, the Chilean and Argentine, are in the hands of different companies, which naturally adds much to the difficulty of working the line. The trains run on alternate days in each direction. There is a com-

fortable hotel at Los Andes where passengers sleep the previous night in order to start the journey over the pass at 7 a.m.; much of the revenue of the line, however, is derived, not from the passenger traffic, but from the cattle brought from the ranches of the Argentine to Chile. The Chilean company is an English one, and the manager, Mr. J. H. White, was good enough to arrange for us to travel with the French minister, who happened to be quitting Santiago, in an observation car at the end of the train; we had, therefore, both pleasant company and most excellent views of the pass. The line winds up a valley, which grows ever narrower between precipitous mountain-sides, but as long as any green thing can find a footing the cultivation is intense; where the incline is most steep a cog-wheel is employed. Presently every trace of vegetation is left behind, and the route enters on its grandest and wildest phase. Bleak rock-masses tower to the sky on every hand, and on their lower slopes rest masses of boulders, which have descended at some earlier stage in the world's history. When a great height has been attained a little lake is reached, which, with its colouring of gorgeous blue, resembles a perfect turquoise in a grey setting. At 10,000 feet the highest point is gained and the train enters the tunnel, which has been bored through the summit and which was opened for traffic in 1909. It here leaves Chile and issues on the Argentine side amidst similar but less striking scenery. The line now runs beneath a series of shelters for protection from snow; they are of corrugated iron and provided with huge doors which can be closed in case of drift. The difficulties which arise in winter from such causes are very great, but at the time of our visit the snow was as a rule confined to occasional white patches near the summit of the mountains: the great peak of Aconcagua, 23,000 feet high, which was now to be seen seventeen miles to the northward, was principally remarkable for standing out as a huge white mass among its greyer fellows.

Inca Bridge is shortly reached, and here we left the train. It is somewhat astonishing to find a large and fashionable hotel in these surroundings; it is resorted to by the inhabitants of Buenos Aires when in search of cooler air or desirous of partaking of the iron waters for which the place is famous. We started at 8 o'clock next morning for the return journey, which we made by riding with mules over the part of the summit traversed by

the tunnel, catching the train on the Chilean side. It is a delightful and easy expedition, which can be thoroughly recommended. The road runs at first parallel to the line, and when it leaves the valley rises by gradual zigzags: our guide dispensed with all corners by means of short cuts, but even so the ascent was not strenuous. As we mounted higher and higher the corrugated iron railway shelters looked like long, headless, grey caterpillars crawling along the valley beneath. We had been warned to expect high wind, but it only became unpleasant as we reached the actual summit, along which runs the boundary between Chile and Argentina. The celebrated statue of the Christ with uplifted hands blessing both countries, which commemorates the arbitration treaty, stands on the main road a little to the east of the track by which we crossed, which was, as usual, a short cut.

The descent fully justified the impression which we had formed from the train of the superior grandeur of the Chilean side; it must be even more impressive when more snow is visible. We regained the railway in plenty of time to see the Argentine train issue from the tunnel at 2 o'clock: the travellers had left Buenos Aires on the morning of the previous day, traversed the great Argentine plains, and spent the night *en route*. If the train is delayed and arrives at the summit too late to be conveyed down before dark, the Chilean officials refuse to take it over, as the descent would be too dangerous; the passengers under such circumstances have to spend the night in their carriages or find such hotel accommodation as is possible. They were indeed, as we saw then, a cosmopolitan crowd; the languages of France, Germany and Spain, also English, of both the European and American variety, were all being spoken in the crowded carriage in which we found places. Our nearest neighbours were two young couples from the United States, evidently making the journey for the first time; as we began the descent through the very finest part of the scenery, they produced packs of cards and became engrossed in a game of auction bridge. This is one of the things which must be seen to be believed, but we were subsequently told it was by no means a unique instance. We arrived at Los Andes, hot and dusty after our early start and long day, to find ourselves carried off to the manager's house and most kindly welcomed by Mrs. and Miss White to a

refreshing tea amid the delight of a cool veranda and beautiful garden.

Next day we left for Valparaiso, retracing our steps as far as the junction of Llay-Llay, and then traversing the coast range. The huge bay of Valparaiso, filled with shipping, is an imposing sight, and the town climbs picturesquely up the mountains which surround it; the higher parts are residential, and are reached by elevators, which are stationed at intervals in the main street, which runs parallel to the harbour. On the lower level there are well-built offices of leading firms, shipping lines, and banks, which give a pleasant sensation of wide interest and touch with the great world. Nevertheless, Valparaiso is scarcely as fine a city architecturally as would be expected from its importance, nor is the hotel accommodation worthy of a first-class port. Its inhabitants cheerily endorse the opinion of a visitor who is reported to have said, "There is one word only for Valparaiso, and that is 'shabby.'" The city has, however, profited through the rebuilding necessitated by the earthquake, and the improvement of the harbour and other works were in progress. The earthquake is still a very present memory; one resident showed us the spot where one of his servants, escaping from the house at the same time as himself, was killed by falling masonry.

We called on Messrs. Williamson & Balfour; the firm have a financial interest in Easter Island, and it was through their kind permission that we were visiting it. We saw Mr. Hope-Simpson, one of the managing partners; his power and expedition filled us with grateful awe. He sat at the end of a telephone and appeared to put through in a few minutes all our arrangements, whether with the Government, shipping, or docks, which would have taken us many days of weary trudging about the city to accomplish. I have often thought of that morning when confronted with the appalling delays in public offices at home. We were introduced by him to Señor Merlet, the chairman of the company for the Exploitation of Easter Island, who are the direct lessees; he had been there himself and was kind enough to give us all information in his power.

We returned to Talcahuano by sea as the easiest method. There were a few more days of preparation, and on Friday, February 13th, a date subsequently noted by the superstitious,

we were at length ready to depart. As the last things were hurried on board it recalled our departure from Falmouth: this time the deck had to accommodate paraffin tins full of cement to make a dock for Mr. Ritchie's tidal observations; the passage had to find room for a table for survey purposes; rolls of wire for excavation sieves were strapped beneath beams of the saloon; while on the top of one was fastened a row of portentous jars, the object of which was to hold the acid from the batteries when we left the ship, as the electrical gear would be dismantled when the engineer came on shore in his capacity of photographer. Two zinc baths for laundry work in camp were looked at ruefully; there seemed to be no place for them in heaven or earth, certainly not on *Mana*. But half our heavy task of stowage was accomplished when we were out of Talcahuano Harbour, the boat began to roll prodigiously, and the work was finished somehow with astonishing rapidity.

The next day found us all confined to our cabins, having, after our time on land, temporarily lost our sea legs. By Sunday we began to feel better, except Mr. Corry, who had a slight temperature and complained of feeling unwell. When on Monday we arrived at Juan Fernandez, S. was down with dysentery and a temperature of 103°, while Mr. Corry's rose, to our alarm, to 104°; Tuesday and Wednesday he was still in high fever, and by Wednesday evening it was obviously useless to hope that his illness was either influenza or malaria: there was nothing to be done but to act on the third possibility and assume that it was typhoid fever; we therefore turned the ship round and ran for Valparaiso. The prospect of the passage back was hardly cheerful; I was out certainly for fresh experiences, but not for the responsibility of nursing typhoid and dysentery at the same time in a small boat in mid-Pacific. Each twelve hours, however, was got through somehow, and better on the whole than might have been expected. S. happily improved, and our poor geologist himself was wonderfully cheerful and plucky; the sea was kind to us, and we reached Valparaiso on Sunday morning with our invalid in a condition which we felt did us credit. The difficulties of arriving in port with illness on board proved to be not so great as I, at any rate, had feared; the authorities were most kind in allowing us to haul down our yellow flag almost at once, and taking us to a Government

anchorage. The harbour doctor was found to give the necessary authority for landing a sick man, while arrangements were made with the hospital for a stretcher and ambulance, and by the middle of the afternoon the patient was comfortably on shore and in bed. The British hospital at Valparaiso is new, reserved almost entirely for paying patients, and much surpasses in comfort anything that we have either of us seen in England. Our diagnosis unfortunately proved to be accurate, but we had the comfort of knowing that the illness was well understood, as typhoid is, it appeared, very common in South America, especially among new-comers. It had been obviously contracted during the time at Talcahuano, when both Mr. Corry and Mr. Ritchie had had frequent meals on shore.

We waited in port for a week, communicating by cable with the friends of our patient, and then held a council of war. The doctor gave it as his opinion that there was no reason for delay, and it was obviously impossible in such an illness to wait pending recovery. We had, however, to face the position that there was a chance, although a slight one, of other cases occurring on board; hospital records show a percentage of about 3 per cent. of doctors and nurses infected by patients, and of course our precautions had, through circumstances, been neither so timely nor so thorough; with 2,000 miles of Pacific before us we felt that we could take no risk. On the other hand, we had no wish for further experiences in hanging about in South American ports, more especially as smallpox was at this time raging at Valparaiso. We therefore decided that we would run back again to Juan Fernandez, and put in a few days in a sort of quarantine, before finally leaving for our destination.

The episode was most disappointing for all concerned; nevertheless our prevailing feeling was one of thankfulness both for the sufferer and ourselves, that, if the thing had to be, the illness had declared itself while we were still within reach of help; the thought that we were within measurable distance of having a case of typhoid on Easter Island still makes us shudder. Hopes were cherished for a while that it might be possible for our geologist to join us, either when *Mana* returned or by the Chilean naval training ship, which it was said might shortly visit the island. Unfortunately the case proved not only severe, but was prolonged by relapses, and on recovery the doctor forbade any

such roughing it. Mr. Corry therefore went back to England, from whence he sent us a report on the geology of the Patagonian Channels, and such information as he had gathered on the moot question of the submergence of a Pacific continent. When war broke out he was among the first to join His Majesty's forces, and, alas! laid down his life for his country in September 1915. When on our return to London my husband addressed the Geological Society on the results of the Expedition, our thoughts naturally turned with sadness to the one who, under other circumstances, should have had that honour; I sat next to one of the older Fellows, and he expressed his special sorrow at the scientific loss caused by the early death of our colleague. "Corry was," he said, "quite one of the most promising of the younger men in the geological world."

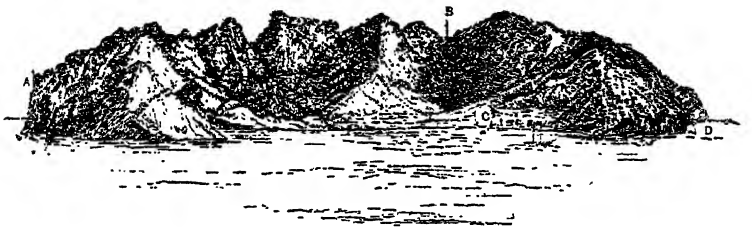


FIG. 20.—JUAN FERNANDEZ: AN IMPRESSION.

CHAPTER VII

JUAN FERNANDEZ

Juan Fernandez was discovered by the navigator of that name on a voyage from Peru to Chile in 1512. He rightly judged that the southerly wind, which impeded all navigation in that direction, might be adjacent only to the mainland; he therefore stood out to the west in the hope of avoiding it, and so came across the island. His voyage was so short that he was accused of witchcraft, and suffered accordingly at the hands of the Inquisition; he was rescued from its power by the Jesuits, to whom he ceded his rights in the newly discovered land. The Order founded a colony there, but it proved a failure. The abandoned island then became the resort of the buccaneers, who preyed on Spanish commerce, and who used it to refit their vessels, so that Spanish merchantmen had special orders to avoid it. The privateers turned down goats to provide meat, on which the Spaniards imported dogs to kill the goats; these achieved their purpose on the low ground, but in the hills the goats held their own, and the battle was therefore a drawn one. It was from an English privateer that the Scotsman, Alexander Selkirk, was landed in 1704; while some of the incidents in the life of Robinson Crusoe, such as those connected with the goats, rats, and cats, were taken by Defoe from the experiences of Selkirk, he is, if looked upon as the prototype of the immortal hero, somewhat of a fraud. Not only is the scene of Crusoe's adventures laid in the West Indies, but Selkirk was put on shore at his own request, with such stores as he required, because he had an objection to the captain. He knew that sooner or later the place would be visited by some ship coming to refit, and he was only there altogether four years and four months. Selkirk reported that he had slit the ears of some of the goats and let them go; a number of these animals so marked and of "venerable aspect" were found in 1741 by Anson's sailors when they arrived on the island after their passage of the Horn.

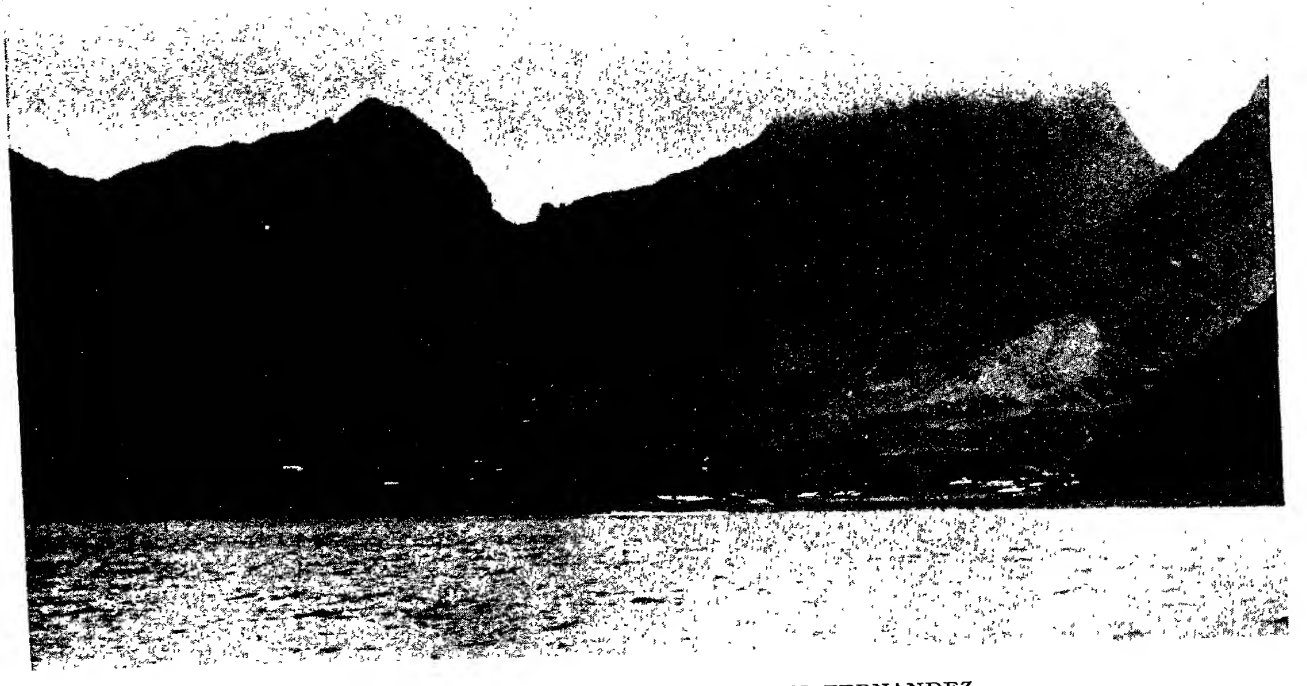
Anson's own ship, the *Centurion*, lay in Cumberland Bay for three

months, during which time two others of the squadron and the victualler arrived at the rendezvous; the *Gloucester* had a terrible experience, being a month within sight of the island with her men dying daily of scurvy, and unable through contrary winds to make the anchorage. The crews of the three men-of-war had numbered on their departure from England 961: only 335 of these were alive when they left Fernandez. The state of affairs is less surprising considering that Anson was obliged to take a large consignment of Chelsea pensioners; the almost incredible age of some of the company comes out incidentally in the statement that owing to scurvy the wound of one man reopened which had been received in the battle of the Boyne fifty years before.[1] The island was subsequently occupied by the Spanish, and after the independence of Chile it was for a while used as a convict settlement.

OUR time in "quarantine" at Juan Fernandez proved most enjoyable. We lay in Cumberland Bay, which is the only anchorage; being on the north side, it is sheltered from the south-east trade wind. The island is volcanic, but the actual craters have broken down in course of ages, and their form can no longer be traced, at least by the superficial observer; it is now a mass of mountains of striking shapes, interspersed with wooded ravines. We were able to see certain portions, mounted on ponies, but much of the ground must be impossible to traverse. S. had a day's goat-stalking, but saw only two animals, and those were out of rifle shot; the ponies, he said, scrambled about like cats, putting their fore feet on the higher rocks and so dragging themselves up. The cattle which roam over the island are not infrequently killed by falling down the precipices. Our meat orders were executed by four men in a boat armed with rifles, who went round by sea to some spot where the beasts were likely to be found, and having shot one cut it up and brought it back. The result was rather a plethora of Sunday beef even for a yacht's hungry crew.

A spot known as Selkirk's Look-out (fig. 20B), on the dividing ridge of the island, commands glorious views of the other side and the adjacent island of Santa Clara; to gaze down from the wooded heights on to the panorama of sea and land 2,000 feet below seemed like a glimpse into an enchanted land. The tablet which marks the spot was put up by H.M.S. *Topaze* in 1868. We also visited a cave (D) which tradition points out as Selkirk's first residence, rowing in the boat round cliffs

[1] See *Anson's Voyage Round the World*, quarto ed., 1748, p. 102



CUMBERLAND BAY, JUAN FERNANDEZ.

FIG. 22.

SELKIRK'S CAVE, JUAN FERNANDEZ.

so steep that a stone dropped from the top would fall more than 1,000 feet clear into the sea; flights of pigeons wheeled out from the rocks, looked at us, and went away again. The landing-place for the cave is somewhat dangerous from the view of safety to the ship's boats, being in a cove whose beach is composed of big boulders. Once on shore the way lies through a mountain-spur on the right, which has been worn by the force of the waves into an imposing natural arch. It leads on to a little lawn at the end of a valley running up into the mountains, down which flows a small stream. In the hillside is the cave opening on to the meadow and looking out to sea; the fireplace is visible, also a shelf cut in the rock and niches to hold utensils. A prominent feature near the anchorage are six or eight large caves (C), like big halls, the roofs of which are adorned with drooping ferns, giving the effect of a beautiful greenhouse: if originally natural they have probably been much enlarged. They are said to have been used by the Spaniards for their prisoners. Someone had been digging in the floor for treasure, under the assumption that it had been left by pirates, presumably of an earlier day.

Juan Fernandez has at present some 300 inhabitants; its industry is lobster-canning. Lobsters are also taken alive in the tank of a motor-schooner to Valparaiso, their value growing *en route* from 2*d.* each in the island to 3*s.* 9*d.* in the city. The schooner was also the mail-carrier, and we took a mutual and friendly interest in one another, as she and *Mana* were about the same size. An old gentleman was in charge of the island as governor, supported by four gendarmes; serious offenders are exported to the mainland. The means of communication will shortly be more rapid, as a house was already built to be used for wireless installation (A).

On March 9th, 1915, one year precisely from the date we left the island, the German ship *Dresden* arrived in Cumberland Bay. She had been driven by want of coal out of her hiding-places in the southern channels and sought refuge at Juan Fernandez. Here after five days she was found by the *Glasgow* with her flag still flying. She had many times broken neutrality regulations, and the Chilean governor with his gendarmes could scarcely, as will have been seen, be expected to intern her. The *Glasgow* fired, the *Dresden* replied, tried to negotiate, and then

blew herself up. The crew had all been landed, and the officers were conveyed to Chile with the mails and lobsters. Thus in the twentieth century did Fernandez once again play its part as a place of resort in time of war.

After five days, no illness having appeared, we felt we might with safety depart, and we started therefore on our 2,000-mile voyage, the last stage of the outward journey.

CHAPTER VIII

LIFE ON BOARD

THIS is perhaps as good a time as any to attempt to give a general impression of life on board the yacht. In the first place it should be realised that no hardship was involved, and that the sense of safety, so far from being less, soon became infinitely greater than on a larger ship. Not only does a small boat ride over the waves like a cork, but there is the assurance that in case of accident everyone will know what to do, and orders will be received without delay; there is plenty of room in the boats, and the lowering away is known to be a comparatively easy matter. On first going on board a big liner after being accustomed to *Mana*, it felt an alarmingly dangerous means of transit.

Existence on any ship has drawbacks in bad weather or extreme heat, but on the yacht the arrangement by which the saloon and cabins were connected with the deck-house made the circulation of air particularly good. A sailing ship is also without the universal and unpleasant draughts which are omnipresent in a steamer. In regard to the pleasure of movement there is of course no comparison between the two.

As to the food there cannot be the same variety where no refrigerators are possible, and preserved and salt meats are apt to become monotonous, but we always left port with as large a supply of fresh meat as possible, and a few hens and sometimes a sheep. Preserved vegetables are good, and potatoes could be carried throughout a voyage, also eggs, and some fruit such as bananas. With but few exceptions, in very bad weather, we had bread every day in the cabin and twice a week in the forecastle. The crew much preferred tinned milk and declined fresh even when it was available, and for the saloon the unsweetened variety was quite pleasant. In all other respects the meals were such as would obtain in any simple household at home.

The routine of ship's life turns on the watches, the alternate four hours on and four hours off of the crew. Only in case of urgency is it permissible to call the watch below, and hence any deck work, such as altering or shortening sails, when it is not immediately imperative, waits for the changes of the watch at 8, 12, and at 4, when all the crew are available; those also are meal hours for the forecastle, with which those of the cabin must not clash. The afternoon or dog watches are of two hours only, from 4 to 6 and 6 to 8, in order to secure that the same hours are not kept on two consecutive days by the same members of the crew. It is a strange life from the point of view of the landsman, especially in its bearing on the hours of sleep: eight hours on and eight hours off duty would have seemed preferable, but it is the general rule throughout the merchant service, and the men are accustomed to it.

My own daily round began with ordinary domestic duties, which were seldom accomplished before 11 o'clock. On Saturday the work took even longer, as, in addition to the usual business of life, the weekly stores were given out to the forecastle, and fresh boxes of provisions were fetched up from below and decanted into tins for shelves; if weather permitted the main hold was opened. Not only do a marvellous number of small things need attention on a boat, but every action takes much longer, owing to the constant movement of the vessel; each article, for example, has to be put down so that it cannot be overthrown by a sudden lurch. To my friends who were anxious as to what we did for exercise, I replied that to give out stores in a rolling boat, in imminent danger of having the whole contents of a shelf thrown at one's head, was an acrobatic performance which involved sufficient activity to last the twenty-four hours. The same is also true in degree of every muscular movement, so that the need was rarely felt for such artificial exercise as deck promenades. This was as well, for as both the lifeboat and cutter were carried in the waist of the ship when we were at sea, the space available for "constitutionals" was prescribed.

On certain passages when such a precaution seemed desirable, as for instance in crossing the Doldrums, the supply of water was rationed; a gallon per man per day is the allowance, of which the cook took the morning quota, or half of the whole amount; in the afternoon everyone produced a quart tin to be

filled (about a fair-sized hot-water can), and this was the private reserve for washing and drinking. It is wonderful what can be done with it, and to use a full basin of water for the washing of hands and then throw it away seems even to-day wicked waste; the Stewardess was given a double supply, and found it more than necessary. A new form of philanthropy came into play, when one member might be overheard saying to another, "Can I let you have some of my savings, I am really quite well off," the savings being *aqua pura*. When rain came every available utensil was utilised to catch it, and we all suddenly became millionaires. It must be borne in mind that for many things, such as bathing and scrubbing down, there was an unlimited supply of salt water, and a "salt-water soap" proved a great success.

When the household duties were over for the time being, the favourite resort, if the weather was bad or very hot, was in the deck-house, otherwise it was the after end or poop of the ship. This space, which was that above the chart-room, and of course the place of the helm, was raised as in old-fashioned ships, so that it was almost always dry even if the waist of the ship was slightly awash. There was no need, nor indeed space, for chairs; cushions on the deck made satisfactory seats with the steering-gear casing for a back, or in stormy weather on the top of the box, with a rope to cling to if necessary. The position had to be changed of course from time to time if the vessel went over on the other tack.

A certain amount of writing and reading was accomplished, but not so much as had been expected, for any considerable roll made them a strain on the eyesight; a monumental piece of embroidery, which was to have commemorated the voyage, was brought back practically untouched. Even when no fixed occupation was possible the hours evaporated marvellously, and for the first time on a voyage it was a pleasure to see the hands of the clock put back. There was usually something to observe going on on deck, and the speed at which the vessel was travelling was a perennial source of interest: four miles an hour was fair, six was good, and anything over eight was exciting. The speed was checked every watch by means of the patent log, a mechanical screw which trailed behind the vessel and whose evolutions registered its rapidity; its reckoning, however, became more than once somewhat surprising, owing to the sharks which

mistook it for something good to eat, and its bright copper surface was accordingly painted black. We once nearly secured a baby shark, which could be seen clearly in the green water following the salt meat which was being soaked by being towed overboard; the usual little pilot-fish was in attendance. It took a bait, but got away with the hook just as it was being hauled over the rail. This was almost the nearest we came to success in fishing from the deck, in which we were uniformly unfortunate, in spite of the fact that all on board were fishermen and the crew were professionals. Passing bird and marine life were frequently of interest. Above all the ever-changing ocean was an immediate neighbour, always claiming attention, whether it bore a calm blue surface, on which was traced the white line of the vessel's course, or resolved itself into a grey mass of tumbling billows, ever trying to break and again falling back, leaving little white crests to mark their vain attempt. It is presumably from this lazy frame of mind on the old sailing vessels that the idea arose of a voyage as a cure for overwrought nerves; the present mail steamer, with its hurly-burly of strangers, noisy children, deck sports, and sweeps on the log may or may not be a place of entertainment—it can hardly be considered one of rest.

When the ship's bell sounded eight bells, or noon, all the hands which could be spared went below to their dinner, a wonderful stillness reigned, and the deck was devoted to the solemn ceremonies of navigation. Three figures, those of the Navigating Lieutenant, the Sailing-master, and frequently that of S., might be seen balanced in various attitudes, sextant in hand, endeavouring to shoot the sun. The most exciting moment of the twenty-four hours was when the paper was handed in which stated the exact position of the vessel, and the amount she had done on her course in the last twenty-four hours. It was naturally preluded by guesses as to what the result would be, those who had kept themselves informed of the records of the patent log having an undue advantage.

The hours between luncheon and tea time were largely devoted to slumber, and the ship was kept as quiet as possible in order not to disturb the men who had kept the middle watch the preceding night; their rest was apparently much more affected by noise than is generally presumed to be the case with

non-brain workers. The same sound varies in its effect on different persons; when it was necessary to use the engine the Sailing-master complained that he could never sleep with that "unnatural noise" going on. He altogether refused to allow that its regular beat might be considered less distracting than the spasmodic jibing of the ship, with its inevitable accompaniment of shouting of orders, stamping, and hauling of ropes; those he maintained were absolutely "natural" sounds. This recalls the attitude of the cook to cabbage day, which, though beloved of the men, is, under certain conditions of the elements, the reverse of pleasant to others on a small vessel, so much so that on many yachts its recurrence is restricted by the ship's articles; *Mana's* cook was of the opinion that the smell was "rather nice"; he evidently considered it a "natural" odour, which perhaps on the whole was fortunate.

The most pleasant time of all on deck was after tea; it was then cool, with the almost daily spectacle of a magnificent sunset. Sometimes the sinking globe went down amid a glory of clouds, which turned the sea into a blaze of red and gold; at others its descent could be traced inch by inch as the ball of fire sank below the horizon on its road to other lands, leaving behind it a track of light across the still waters. One evening in the Pacific the whole sky, east as well as west, was covered with pink clouds, which found their counterpart in the water below. It is at times such as sunset, when sky and sea form a joint panorama, that the dweller on the water truly comes into his own. In ordinary circumstances, contrary to what might be expected, the ocean appeals less to the imagination when seen from shipboard than when viewed from the land; without foreground or counterbalancing element its restless infinity seems bewildering to the comprehension. But when at sea the sky takes up the tale; then the waters below and the firmament above each find in the other their perfect complement and expression.

As soon as twilight reigned the gazer was recalled to the work-a-day world; the navigator came up from the chart-room to take the ship's position by the evening star, the junior member of the watch clambered up the fore-rigging to hang out the ship's lights, and so night fell.

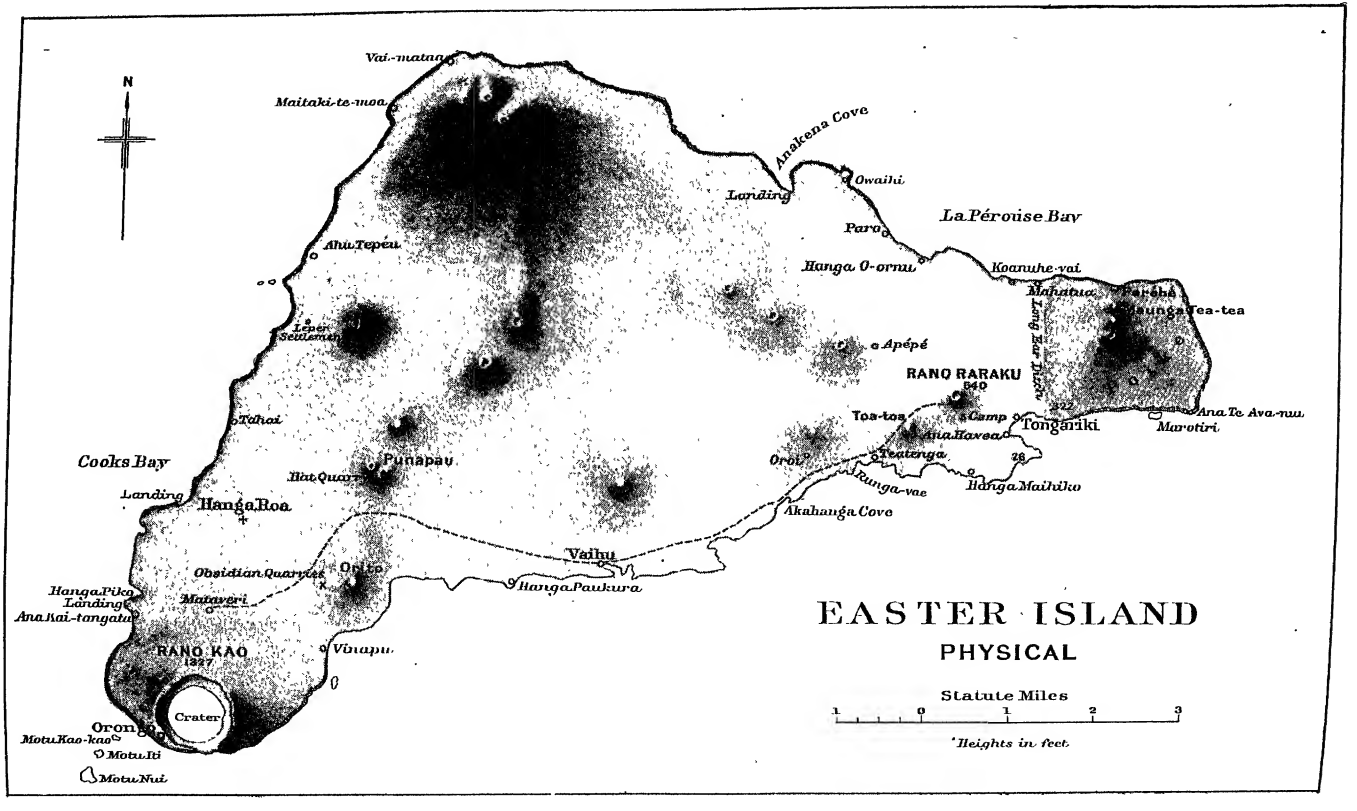
One of the charms of a ship is that she never sleeps. In the hours of darkness the ordinary habitation relapses to a state of

coma, and to the mental condition of the primitive jelly-fish; a vessel is always alive, always intelligent. The larger the craft, the more the vital functions are withdrawn from the common gaze; in a small yacht they are always visible as an inseparable part of the whole. In wakeful nights and from hot cabins, it is only necessary to stumble up the companion to find the cool freshness of deck and waking companionship. Silhouetted against the sky, is the dark figure of the man at the wheel, somewhere in the gloom is the officer in charge, and for'ard, though invisible, is the watch on the look-out. The latest news of wind and progress are to be had for the asking; it is full of mystery and yet reassuringly practical.

The night *Mana* crossed the Equator is unforgettable; the yacht, borne along by the newly caught trade wind, raced through the water with the very poetry of motion. The full moon made a silver pathway over the sea and lit up not only the foam from the vessel's bows, but also her white sails, which were faintly reflected in the dark sea; the masts and rigging stood out black against the deep blue sky, while over all was the Southern Cross. What has been said of sunset from shipboard is still more true of moonlight and starlight nights. Then ocean and sky become a whole of marvellous beauty, and of majesty beyond human ken; always suggesting questions, always refusing the answer.

PART II

EASTER ISLAND


N
Vai-matau
Maitaki-te-moa
Anakena Cove
Owaihi
Landing
La Pérouse Bay
Paro
Ahu Tepeu
Hanga O-ornu
Koanuhe-vai
Mahatua
Paeheke
Hanga Tea-tea
Leper Settlement
Apépé
Long Ear Dance
RANO RARAKU
340
Tea-tea
Camp
Tongariki
322
Ana Te Ava-nui
Marotiri
Tahai
Cooks Bay
Punapau
Ana Kaveo
Orou
Teatenga
28
Hanga Mailiku
Landing
Hanga Roa
Runga-vae
Akahanga Cove
Vaihu
Obsidian Quarries
Orito
Hanga Pau-kura
Hanga Piko
Landing
Mataveri
Ana Kai-tangata
RANO KAO
1327
Vinapu
Crater
Orongo
Motu Kao-kao
Motu Iti
Motu Nui
EASTER ISLAND
PHYSICAL
Statute Miles
1 0 1 2 3
Heights in feet

OUTLINES OF COAST AND POSITION OF PRINCIPAL MOUNTAINS, MAINLY FROM U.S.A. HYDROGRAPHIC OFFICE CHART NO. 1119.

POSITIONS OF CERTAIN LESSER MOUNTAINS, FROM EYE-SKETCHES BY THE AUTHOR.

HEIGHTS OF RANO AROI AND RANO KAO, FROM ADMIRALTY CHART NO. 1386.

HEIGHT OF RANO RARAKU, AS DETERMINED BY LIEUT. R. D. RITCHIE, R.N.

Ana Kai-tangata.

orth

Foreground, Rano Kao.

FIG. 24.

Eastern Headland.
Rano Raraku.

Christmas Day, 1914.

GLOSSARY

OF NATIVE WORDS FREQUENTLY EMPLOYED

Ahu . A burial place
Aku-aku . Spirit
Ana . Cave
Ao . . The clan or clans celebrating bird rites
Ao . . A ceremonial paddle
Ariki . Chief
Atua . God

Hanga . Bay or foreshore
Haré . House
Hau . Hat
Hopu . Servant to fetch "First egg"

Iti . . Small
Ika . Fish
Ivi-atua . Person supernaturally gifted

Kai . Eat
Kaunga . Function in honour of a mother
Ko . . . Definite article before proper nouns
Kohau rongo-rongo . Tablet with script
Koro . Function in honour of a father

Marama . Light (In Tahitian = moon)
Manu . Bird
Manu-tara The sacred bird (Sooty Tern)
Mata . Clan or group

Mataa . Obsidian spear-head
Maunga . Hill
Miro . Wood
Moai . An image
Motu . Islet

Nui . Big

Paina . A wooden figure, also the function connected with it
Pera . Taboo for the dead
Poki . A child

Raa . Sun
Ranga . Captivity
Rano . Crater lake, also the extinct volcano
Rapa . Small dancing-paddle
Roa . Long
Rongo-rongo Sacred words

Také . Ceremonial retreat
Tangata . Man
Tangata-ika A slain man
Tangata manu . The bird-man
Tangata rongo-rongo . Man learned in sacred words (generally the script)
Tatane . Spirit (from "Satan")
Te . . Definite article before common noun
Tea . White

Words such as *nui*, *iti*, and *roa*, when they have become in themselves geographical names, are treated as proper nouns, otherwise as adjectives.

CHAPTER IX

ARRIVAL AT EASTER ISLAND

1722 . .	Discovered by the Dutch Admiral Roggeveen.
1770 . .	Visited by the Spaniards under Gonzalez.
1774 . .	Visited by the English under Cook.
1786 . .	Visited by the French under La Pérouse.
	Receives occasional visits from passing ships.
1862 Dec. .	Peruvian slave-raiders carry off many inhabitants.
1864 Jan. .	Arrival of first missionary from Valparaiso.
1867 (*cir.*) .	Commercial exploitation begins — arrival of M. Dutrou Bornier from Tahiti.
1868 . .	Visit of H.M.S. *Topaze*—removal of statues now in British Museum.
1888 . .	Visit of U.S.A. warship *Mohican*.
1888 . .	Chilean Government takes possession.
1897 . .	Mr. Merlet of Valparaiso leases the greater part of the island, and subsequently forms a company for the "Exploitation of Easter Island."

For further historical details, see below, pp. 200–10.

EASTER Island at last! It was in the misty dawn of Sunday, March 29th, 1914, that we first saw our destination, just one week in the year earlier than the Easter Day it was sighted by Roggeveen and his company of Dutchmen. We had been twenty days at sea since leaving Juan Fernandez, giving a wide berth to the few dangerous rocks which constitute Salo-y-Gomez and steering directly into the sunset. It was thirteen months since we had left Southampton, out of which time we had been 147 days under way, and here at last was our goal. As we approached the southern coast we gazed in almost awed silence at the long grey mass of land, broken into three great curves, and diversified by giant molehills (fig. 23). The whole looked an alarmingly big land in which to find hidden caves. The hush was broken by the despairing voice of Bailey, the ship's cook. "I don't know how I am to make a fire on that island, there is no wood!" He spoke the truth; not a vestige of timber or even brushwood was to be seen. We swung round the western headland with its group of islets and dropped anchor in Cook's Bay. A few hundred yards from the shore is the village of Hanga Roa, the native name for Cook's Bay. This is the only part of the island

which is inhabited, the two hundred and fifty natives, all that remain of the population, having been gathered together here in order to secure the safety of the livestock, to which the rest of the island is devoted. The yacht was soon surrounded by six or seven boat-loads of natives, clad in nondescript European garments, but wearing a head-covering of native straw, somewhat resembling in appearance the high hat of civilisation (fig. 83).

The Manager, Mr. Edmunds, shortly appeared, and to our relief, for we had not been sure how he would view such an invasion, gave us a very kind welcome. He is English, and was, to all intent, at the time of our arrival, the only white man on the island; a French carpenter, who lived at Hanga Roa with a native wife, being always included in the village community. His house is at Mataveri (fig. 25), a spot about two miles to the south of the village, surrounded by modern plantations which are almost the only trees on the island; immediately behind it rises the swelling mass of the volcano Rano Kao. The first meal on Easter Island, taken here with Mr. Edmunds, remains a lasting memory. It was a large plain room with uncarpeted floor, scrupulously orderly; a dinner table, a few chairs, and two small book-cases formed the whole furniture. The door on to the veranda was open, for the night was hot, and the roar of breakers could be heard on the beach; while near at hand conversation was accompanied by a never-ceasing drone of mosquitoes. The light of the unshaded lamp was reflected from the clean rough-dried cloth of the table round which we sat, and lit up our host's features, the keen brown face of a man who had lived for some thirty years or more, most of it in the open air and under a tropical sun. He was telling us of events which one hardly thought existed outside magazines and books of adventure, but doing it so quietly that, with closed eyes, it might have been fancied that the entertainment was at some London restaurant, and we were still at the stage of discussing the latest play.

"This house," said our host, "was built some fifty years ago by Bornier, who was the first to exploit the island. He was murdered by the natives: they seized the moment when he was descending from a ladder; one spoke to him and another struck him down. They buried him on the hillock near the cliff just outside the plantation: you will see his grave, when the grass is not so long; it is marked by a circle of stones. A French

warship arriving almost immediately afterwards, they explained that he had been killed by a fall from his horse, and this is the version still given in some of the accounts of the island, but murder will always out. After that another manager had trouble: it was over sheep-stealing. There were three or four white men here at the time, and they all rode down to the village to teach the natives a lesson, but the ponies turned restive at the sound of gun-fire, and the rifles themselves were defective, so the boot was on the other foot, and they had to retreat up here followed by the mob; for months they lived in what was practically a state of siege, with one man always on guard for fear of attack.

"My latest guests were a crew of shipwrecked mariners, Americans, who landed on the island last June. A fortnight earlier the barometer here had been extraordinarily low, but we did not get much wind; further to the south, however, the gale was terrific, and the *El Dorado* was in the midst of it. The captain, who had been a whaler in his day, said that he had never seen anything approaching it, the sea was simply a seething mass of crested waves. The ship was a schooner, trading between Oregon and a Chilean port; she was a long way from land, as sailing vessels make a big semicircle to get the best wind. She had a deck load of timber, 15 feet high, which of course shifted in such a sea; she sprang leaks in every direction, and it was obvious that she must soon break up. The crew took to their boat, not that they had much hope of saving their lives, but simply because there was nothing else to be done. They got some tins of milk and soup on board, and a box of biscuits, and a cask holding perhaps twenty gallons of water. The captain managed to secure his sextant, but when he went back for his chronometers, the chart-room was too deep in water for him to be able to reach them. They saw by the chart that the nearest land was this island: it was seven hundred miles off, and as they had no chronometer, and could take no risks, they would have to go north first in order to get their latitude, which would add on another two hundred. There was nothing for it, however, but to do the best they could; they had more gales too, and only saved the boat from being swamped by making a sea-anchor of their blankets. The spray of course kept washing over them, and as the boat was only 20 feet long and there were eleven of

them, there was no room for them to lie down. Each day they had between them a tin of the soup and one of milk, and an allowance of water, but the sea got into the water-cask and made it brackish, and before the end their sufferings from thirst were so great that one or two of them attempted to drink salt water; the mate stopped that by saying that he would shoot the first man who did it.

"After nine days they sighted this island, but then luck was against them, for the wind changed, and it was forty-eight hours, after they saw the coast, before they were able to beach the boat. They got on shore at the other end of the island, which is uninhabited. They were pretty much at the last stage of exhaustion, and their skin was in a terrible condition with salt water; their feet especially were so bad that they could hardly walk. One of them fell down again and again, but struggled on saying, 'I won't give up, I won't give up.' At last my man, who looks after the cattle over there, saw them and brought me word. The officers were put up here, you must really forgive the limitations of my wardrobe, for I had to give away nearly everything that I had in order to clothe them.

"The most curious part of the whole business was that after they had been here three or four months the captain took to the boat again. I believe that he was buying his house at home on the instalment plan, and that if he did not get in the last payment by the end of the year the whole would be forfeited; anyway, as soon as the fine weather came on he had out the boat and patched her up. He got two of his men to go with him. I lent him a watch for navigation purposes, and we did all we could for him in the way of food; there were no matches on the island, so he learnt how to make fire with two pieces of wood native fashion. Anyway, off he started last October for Mangareva, sixteen hundred miles from here; he must have got there safely, for you brought me an answer to a letter that I gave him to post.[1]

[1] Captain Benson and his crew made the voyage in the ship's boat to Mangareva in sixteen days, and after two days there left in the same manner for Tahiti, accomplishing the further nine hundred miles in eleven days. Mr. Richards, the British Consul at the latter place, told us later of his astonishment, when, in answer to his question whence the crew had come, he received the amazing reply, "Easter Island." For the whole account see *Captain Benson's Own Story* (The James H. Barry Co., San Francisco).

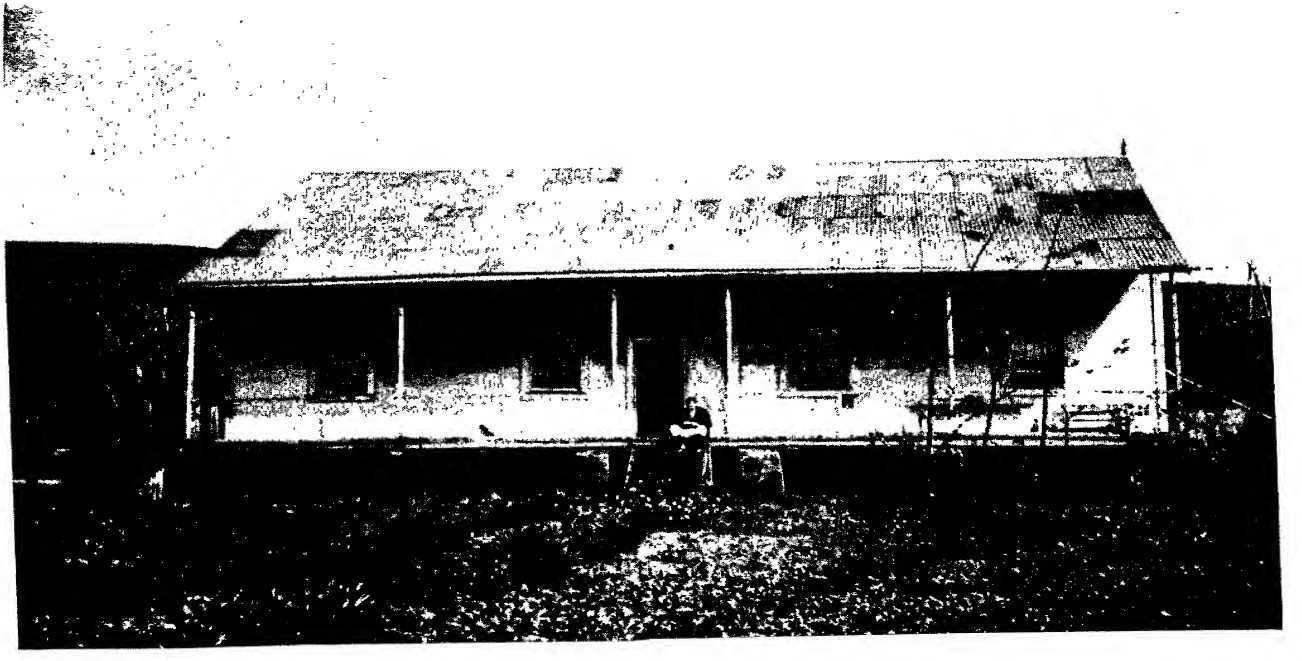
But," and here for the first time the eyes of our host grew animated, and he raised his voice slightly, "it is maddening to think of that cargo drifting about in the Pacific. I do trust that next time a ship breaks up with a deck-load of timber, she will have at least the commonsense to do so near Easter Island." Then, after a pause, "I wish you no ill, but the yacht would make a splendid wreck."

We kept *Manà* for nearly two months while learning our new surroundings. Not only were we anxious to find if we had the necessary camp gear and stores, but we were engaged in agonised endeavours to foresee the details of excavation and research, in case essential tools or equipment had been forgotten, which the yacht could fetch from Chile. The time, however, arrived when she must go. Mr. Ritchie was now on shore with us for survey work, but as his service with the Expedition was limited, the vessel had to return in time to take him back to civilisation by the correct date. Mr. Gillam had from this time sole charge of the navigation of *Mana*. Instructions for him had to be written, and correspondence grappled with; business letters, epistles for friends, and reports to Societies were hurriedly dealt with; and an article which had been promised to the *Spectator*, "First Impressions of Easter Island," was written in my tent, by the light of a hurricane-lamp, during the small hours of more than one morning.

When the mail-bag was finally sealed, there was great difficulty in getting hold of *Mana*. The position of a skipper of a boat off Easter Island, unless she has strong steam-power, is not a happy one. Mr. Gillam used to lie in his berth at Cook's Bay hearing the waves break on the jagged reaches of lava, and the longer he listened the less he liked it. The instant that the wind shows signs of going to the west, a ship must clear out. It is reported that on one occasion there were some anxious moments on board: a sudden change of wind and tide were setting the yacht steadily on the rocks; the engineer was below in the engine-room, and Mr. Gillam shouted to him down the hatchway, "If you can't make that motor of yours go round in three minutes, you will know whether there is a God or not."

To get in touch with the yacht was like a game of hide-and-seek, for often by the time those on shore arrived at one side of

FIG. 25.



MANAGER'S HOUSE, MATAVERI.
Supported by foundation-stones of old native houses.

the island, the wind had shifted, and she had run round to the other. She was on the north coast when we managed to catch her, and to get back to Mataveri necessitated retracing our steps, as will be seen from the map, over the high central ground of the island, and down on the other side; the track was rough, and the ride would ordinarily take from two to three hours. It was 4 p.m. before all work was done on board, the good-byes said, and we were put on shore; the sandy cove, the horses and men, with *Mana* in the offing, formed a delightful picture in the evening light, but there the charms of the situation ended. There was only one pack-horse, and a formidable body of last collections sat looking at us in a pile on the grass. In addition we had not, in the general pressure, sufficiently taken into account that we were bringing off the engineer, now to be turned into photographer; there he was, and not he alone but his goods and bedding. The sun set at five o'clock, and it would be dark at half-past five; it seemed hopeless to get back that night.

A neighbouring cave was first investigated as a possible abiding-place, but proved full of undesirable inhabitants, so everyone set to work and the amount stowed on that wretched pack-horse was wonderful. Then each attendant was slung round with some remaining object, S. took the additional member on his pony, and off we set. Before we got to the highest point all daylight had gone, and there was only just enough starlight to keep to the narrow track by each man following a dim vision of the one immediately in front. My own beast had been chosen as "so safe" that it was most difficult to keep him up with the others, let alone on his four legs. The pack-horse, too, began pointing out that he was not enjoying the journey; the load was readjusted more than once, but when we were on the down grade again he came to a full stop and we all dismounted. There in the creepy darkness we had a most weird picnic; not far off was a burial-place, with a row of fallen statues, while the only light save that of the stars was the striking of an occasional match. S. produced a tin of meat, which he had brought from the yacht, and which was most acceptable, as he and I had had no substantial food, save a divided tin of sardines, since breakfast at 7 o'clock. He shared it out between the party amid cries from our retainers of "Good food, good Pappa," for we were, as in East Africa, known as "Pap-

pa " and " Mam-ma " to a large and promising family. By some inducement the pack-horse was then deluded into proceeding, and we finally reached Mataveri at nine o'clock, relieved to find we had not been given up and that supper awaited us. So did we cut our last link with civilisation, and were left in mid-Pacific with statues and natives.

The next part of this story deals with the island, the conditions of life on it, and our experience during the sixteen months we were to spend there. Such scientific work as the Expedition was able to accomplish will be recounted later.

CHAPTER X

CONDITIONS OF LIFE ON THE ISLAND

EASTER is a volcanic land, and in the earliest days of the world's history great lights and flowing lava must have gleamed across the expanse of water, then gradually lessened and died away, leaving their work to be moulded by wind and tide. The island, as the forces of nature have thus made it, is triangular in shape and curiously symmetrical. The length of the base—that is, of the south, or strictly speaking south-east, coast—is about thirteen miles, and the greatest width about seven miles; the circumference, roughly speaking, is thirty-four miles. The apex, which is the highest ground, is a volcano over 1,700 feet in height whose summit is formed of a cluster of small craters; the eastern and western angles are each composed of a large extinct volcano. The place is geologically young, and the mountains, in contrast to those of Juan Fernandez, still preserve their original rounded shape; there are no ravines, no wooded precipices, no inaccessible heights, but round the whole coast erosion is at work, with the result that, while on the land side the slopes of all these three mountains are gradual, on the sea side—that is, in portions of the north, east, and west coasts respectively—they have been worn back by the power of the waves into imposing cliffs. In the lower districts the sheets of lava form a shore-line of some 50 to 100 feet in height, and extend into the sea in black, broken ridges. Against this coast of alternating high cliffs and jagged rocks the swell of the Pacific is always dashing, and in a high wind clouds of white spray first hide, and then reveal, the inhospitable shore.

The comparatively level and low-lying regions of the island, namely, those which are not covered by the three great volcanoes, consist of the south coast, and of two tracts which run across the island on either side. The high ground which forms the apex of the triangle is thus divided from that of the

eastern and western angles respectively. Another level strip, some quarter of a mile wide at its broadest, lies in an elevated and romantic position around the northern apex between the highest portion of the central mountain and the precipitous sea-cliff. This distribution of the level ground is, as will be later seen, reflected in the disposition of the various clans which formerly spread over the island (fig. 91).

In addition to the three large mountains, there are smaller elevations some hundreds of feet in height, generally in the form of cones with craters distinctly visible. These lesser volcanoes, with one or two exceptions, may be roughly said to lie in two lines which radiate irregularly from the northern eminence, spreading out from it like fingers and pointing respectively to the east and west ends of the south coast. The hills, which may be termed the root of the fingers, form part of the high ground, while those equivalent to the tips rise out of the low-lying portion, where the east and west transverse belts join the southern plain.

In some instances the crater of a mountain has become a lake: when this is the case the term "rano" is prefixed to its name. It is quaintly told that one visitor, considering the volcanic origin, hazarded the suggestion that "rano" was equivalent to fire, to which the natives indignantly replied that, on the contrary, it meant water. These lakes are almost the only water-supply of the island: there is a good rainfall, but no single running stream. Owing to the porous nature of the ground the water sinks beneath the surface, sometimes forming underground channels from which it flows into the sea below high-water mark: thus giving rise to the curious statement of early voyagers that the natives were able to drink salt water[1] (fig. 124). The lower portions of the island are composed of sheets of lava, in process of disintegration, across which walking is almost impossible and riding a very slow process; the surface of the mountains and

[1] "I will only add this one word about the curious way in which they get fresh water on some of the coral islands, such as Nangone, where there is none on the surface. Two go out together to sea, and dive down at some spot where they know there is a fresh-water spring, and they alternately stand on one another's backs to keep down the one that is drinking at the bottom before the pure water mixes with the surrounding salt water."—"Notes on the Maoris and Melanesians," Bishop of Wellington: *The Journal of the Ethnological Society*, New Series, vol. i, session 1868–9.

hills is smoother, being volcanic ash. The whole is covered with grass, which sprouts up between the masses of lava and gives the hills a delightful down-like appearance. Forest growth has probably never consisted of more than brushwood and shrubs, and to-day even those have disappeared.

The best panorama of the island is obtained from the western volcano, by name Rano Kao (fig. 24). Below on the left lies Cook's Bay, with Mataveri and the village of Hanga Roa, and beyond them the high bleak central ground of the island, generally known by the name of one of its craters, Rano Aroi. On the right is the plain of the south coast, culminating in the eastern headland, a district the greater part of which is known as Poike. Just in front of the headland can be seen the two peaks of the mountain of Rano Raraku, from which the statues were hewn and which is the most interesting place in the island; while on a clear day there can be obtained a glimpse of the northern coast and the sea beyond.

Such is Easter Island. It bears no resemblance to the ideal lotus-eating lands of the Pacific; rather, with its bleak grass-grown surface, its wild rocks and restless ocean, it recalls some of the Scilly Isles or the coast of Cornwall. It is not a beautiful country nor even a striking one, but it has a fascination of its own. All portions of it are accessible; from every part are seen marvellous views of rolling country; everywhere is the wind of heaven; around and above all are boundless sea and sky, infinite space and a great silence. The dweller there is ever listening for he knows not what, feeling unconsciously that he is in the antechamber to something yet more vast which is just beyond his ken.

The objects of antiquarian interest proved to be widely scattered. The statues have originally stood on a particular kind of burial-place, generally known as a "terrace" or "platform." These terraces surround the whole coast, and each one had of course to be studied. For those at the western end, and for certain stone remains on the volcano of Rano Kao, Mataveri was a most convenient centre; but the distance from there to the places of interest at the other end of the island was unduly great. We therefore decided to avail ourselves of the offer of the Manager and remain for a while at his establishment, where *Mana* left us, and later move camp. Survey and photography had of course

to keep pace with research, and a general look-out to be kept for any caves which it might pay to explore. There was also the question of getting into touch with the natives and finding if any lore existed which threw light on the antiquities: this last, from what we had been told in England, was not a very hopeful quest; anyway, it seemed wiser to defer it for the moment till we knew something of the language and were more at home in our surroundings.

The Manager's house has six rooms, three of which are at the front, and three, having a separate entrance, at the back. These last, with a most useful attic, Mr. Edmunds kindly put at our disposal, and we supplemented the accommodation with tents pitched in the grounds. My own tent, for the sake of quietness, was on the western side of the plantation, about a hundred yards from the house. S. used to escort me down at night, with a camp lantern, by a little track through the eucalyptus trees, see that all was well, put down the light, and leave me with the mystery of the island. The site was one dedicated to cannibal feasts; immediately behind was the hillock with the grave of the murdered manager; while not far away the waves thundered against the cliffs, making in stormy weather the ground tremble as if with an earthquake. In the morning came the glory of the waking, of being at once *tête à tête* with air, sunshine, and dewy grass: to those who have not known the wonder of these things, it cannot be explained; to those who have experienced it, no words are needed.

Tent life is not all "beer and skittles"; Easter is too windy for an ideal camping-ground; my pitch was sheltered, but even so it seemed at times as if the structure would be carried away bodily. To preserve a tent in place taut ropes are needed, but if rain descends these shrink, and either burst with the strain or tear the pegs out of the ground: the conscientious dweller under canvas will, under these conditions, arise from his warm bed, and in the pouring deluge race round the tent, slacking off the said ropes. Mine, like the stripes of St. Paul, numbered forty save one. Before the end we were able to make different arrangements.

When we had been some three and a half months at Mataveri—that is, in the middle of July 1914—we felt that the time had come to begin work on the other end of the island. It must be

remembered that our original idea was that six months would probably suffice for the whole inquiry, and in any case we had no intention of staying beyond the period which would allow of *Mana's* making a second trip to Chile.

We therefore established ourselves at Rano Raraku as the most convenient site. It takes about two hours to ride there from Mataveri. The road is made, like all those in the island, by simply clearing away the stones, but it is wide enough to permit the passage of a wagon. It leads first across the island by the western transverse plain till, at Vaihu, the sea is reached, then runs along the south coast with its low rocks and continuous line of breaking surf. Every step of this part of the way is marked, for those who have eyes to see, with ruined burial-places; many of them strewn with the remains of the statues which have once been erected upon them. As Raraku is approached, there lie by the roadside isolated figures of portentous size, abandoned, it has been thought, in the act of removal from the quarries to the terraces. We grew to know by heart this road, which led from what we termed our "town establishment," to our "country house," and have ridden it, together or separately, at all hours and in every weather. We were not infrequently detained by business, at one end or the other, till too late to save the daylight, and after dark it was not easy to keep to the track, even with the help afforded by the sound of the breakers. Our ponies gave us no assistance in the difficulty, for as foals they had run wild with their mothers, and were, therefore, equally happy wandering off among the fields of broken lava. As the "twilight of the dove" gradually changed to the "twilight of the raven," and the huge figures loomed larger than ever in the gathering gloom, it seemed that, if ever the spirits of the departed revisit their ancient haunts, the ghosts of the old image-makers must be all abroad about their works and places of burial.

Rano Raraku (fig. 45) stands by itself where the flat ground of the southern coast meets the eastern transverse plain, and forms the isolated tip of those lesser volcanoes which have been described as the eastern finger. About a mile to the eastward rises the high ground of Poike. Raraku scarcely deserves the name of mountain, being little more than a basin containing a crater lake; yet it curiously dominates the scene. There will be much to tell of it hereafter; for the moment suffice it to

say that a large number of statues stand on its lower slopes, while above are the quarries from which, with very few exceptions, all the figures in the island have been obtained. The side nearest the sea is a sheer cliff, the extremities of which form the two peaks which are so characteristic of the mountain. Beneath the cliff is a flow of lava; here the French carpenter had managed to put up two iron huts which had been sent ahead from England; one was a store, the other formed my one-roomed villa residence. Their erection was somewhat of a triumph, as all the bolts had been stolen on the way. The rest of the camp, the tent for meals, that of S., and those for the servants, were pitched for protection about 50 feet lower down, on the further side of the lava flow; but even here, owing to the tearing wind which howled round the mountain, their canvas flies had to be tied back and walls erected around them. On our every hand were the remains of native life prior to the removal of the inhabitants to Hanga Roa, the most welcome being a single well-grown tree of the sort known in tropical countries as the "umbrella tree." It was the only example of its kind on the island, and was of an age that suggested it had been planted by the early missionaries.

The whole situation was not only one of striking beauty, but brought with it an indescribable sense of solemnity. Immediately above the camp towered the majestic cliff of Raraku, near at hand were its mysterious quarries and still erect statues; on the coast below us, quiet and still, lay the overturned images of the great platform of Tongariki, one fragment of which alone remains on its base, as a silent witness to the glory which has departed. The scene was most wonderful of all when the full moon made a track of light over the sea, against which the black mass of the terrace and the outline of the standing fragment were sharply defined; while the white beams turned the waving grass into shimmering silver and lit up every crevice in the mountain above.

Easter Island lies in the sub-tropics, and, if the question of wind be eliminated, the climate is as near perfection as possible in this world. There may be, especially in the winter months, a spell of three or four days of rain, or a wind from the Antarctic, when woollen clothes are welcome; and occasionally, in the summer, it is preferable to be indoors during the noontide hours;

but with these exceptions, it is one of those rare localities where it is possible to be warm the whole year round, and yet to utilise to the full the hours of daylight. There are, as might be expected, too many insects; cockroaches abound, out of doors and under statues as well as in houses and tents; when things were very bad they might even be seen on the dinner-table. I was calmly told, with masculine insensibility, that "if I had not naturally a taste for such things, the sooner that I acquired it the better"; the only consolation was that they were of a handsome red variety and not shiny black. Flies also are numerous; I have counted two hundred in a bowl of soapy water, and six or eight at once on my hand while busy writing; "their tameness was shocking to me." Mosquitoes, which have been imported, varied in their attentions; when they were at their worst it was necessary to wear head-gear and dine in gloves. There is said to be no fever in the islands; we had two or three attacks, but it may have been "original sin." Once we had a plague of little white moths, and occasionally, for a short while, visitations of a small flying beetle, whose instinct seemed to be to crawl into everything, making it safer to stuff one's ears with cotton-wool. On these occasions dinner had to be put earlier, owing to Bailey's pathetic complaint that, with a lamp burning in the kitchen, business was rendered impossible from the crowds which committed suicide in the soup.

The lack of firewood was met by using oil; when, later, we had to economise in that commodity, it was supplemented by collecting dried manure. The natives use brushwood or anything they can pick up; their manner of cooking, which is after Polynesian fashion by heating stones placed in the earth, requires very little fuel. The water difficulty was ever present. At the Mataveri establishment the supply collected from the roof was generally sufficient; we arrived, however, in a dry spell, and one morning the request for water was met by the information that the "tank was empty"; even *Mana*, one felt, had never fallen quite so low. It was consoling to be informed that "clothes could always be washed in the crater," a climb of 1,300 feet. At our Raraku camp all the water, except that which could be collected on the roof of a tin hut, had to be fetched from the crater lake; this rendered us tiresomely dependent on getting native labour. The rain-clouds are often intercepted by the high

grounds at the south-western end of the island, in a manner which is most tantalising to the dweller in the eastern, if supplies happen to be low.

The ranch supported at this time about 12,000 sheep, 2,000 head of cattle, and other livestock; we were generously supplied with milk and could purchase any quantity of mutton: beef was not often killed for so small a party. Chickens of a lean species were sometimes available. *Mana* later brought Mr. Edmunds some turkeys which did well. Bananas were useful, when in season. Fig-trees thrive, and we had a lavish and most acceptable supply at Raraku of this fruit from those planted by the natives prior to their removal to Hanga Roa. Vegetables were scarce, as the Manager took no interest in his garden, owing to the depredations of the natives, and we had no time for their cultivation. Groceries had, of course, been brought with us, and on our arrival they were deposited in the locked and strongly built wool-shed at Hanga Piko, a small-boat landing between Hanga Roa and Mataveri. Housekeeping was a much easier business than on the yacht, but S.'s share of practical work was considerably greater, for, beside the initial camp-pitching, all tent or kitchen gear that went wrong and every lamp which would not burn made demands on his time. In his department also came the stud; we had been kindly provided with some of the island ponies, of which there are about five hundred; as export is impossible, the value of each animal is put at 5*s*. When not in use the steeds were put out to graze as best they might; and in addition to the care of the saddlery, every tethering rope which chafed through against the stones was brought for repair to the head of the Expedition. In judging of scientific work under such conditions, it must always be borne in mind how many hours and days are thus inevitably consumed in practical labour.

There was, luckily for us, the one skilled workman on the island, the French carpenter who had made his way from New Caledonia; his name was Vincent, but he answered to the appellation of "Varta" (the figure in fig. 37); the difficulty was to obtain his services as he was constantly employed on the estate. One of our few retainers, Mahanga (fig. 89), was not a native of Easter, but had come from the Paumotu Islands; he served faithfully for many months, the goal in view being the

possession of one of the tin huts, which passed into his keeping when we left the island. It was related that having been at one time afflicted with some skin disease, he had taken the heroic remedy of plunging into a vat in which the sheep were being dipped, with painful but beneficial results. The native girls make quite tolerable servants, and I was fortunate in never being without one (fig. 29). They take a keen interest in their own clothes and some of them are surprisingly good needle-women; in some of the houses there are even sewing-machines. But to obtain labour, whether for camp work or excavation, was always difficult, and for a while circumstances rendered it almost impossible.

CHAPTER XI

A NATIVE RISING

It was stated a little while back that we were left on the island with statues and natives. The statues remained quiescent, the natives did not. The inhabitants, or Kanakas to give them their usual name [1] (fig. 26), are on the whole a handsome race, though their voices, particularly those of the women, are very harsh. They are fortunate also in possessing attractive manners, from which they get the full benefit in their intercourse with passing ships. The older people we found always kind and amiable, but the younger men have a high opinion of their own merits, and are often difficult to deal with. Their general morality, using the word in its limited sense, is, in common with that of all Polynesians, of a particularly low order; it is true that the Europeans with whom they have come into contact did not initiate this condition, but they have seldom done anything to show that that of their own lands is in any way higher; a fact which should be remembered when complaint is made that Kanakas "have no respect for white men." The native love of accuracy also leaves a good deal to be desired, and their lies are astonishingly fluent; but lack of truthfulness is scarcely confined to Kanakas. In common with all residents in the South Seas, or indeed elsewhere, they exert themselves no more than is necessary to supply their wants; unfortunately these, save in the matter of clothes, have scarcely increased since pre-Christian days. The food-supply of sweet potatoes and bananas, with a few pigs and fowls, can be obtained with a minimum of labour; the keeping of sheep and cattle is not permitted by the Company, owing to the impossibility of discovering or tracing theft. Their old huts, which were made with sticks and grass, have been replaced by

[1] "Kanaka" is a name originally given by Europeans to the inhabitants of the South Seas, and is one form of the Polynesian word meaning "man."

A GROUP OF EASTER ISLANDERS OUTSIDE THE CHURCH DOOR.

small houses of wood or stone, but, except in a few cases, there is no furniture, and the inhabitants continue to sleep on the floor, in company with hens, which freely run in and out (fig. 27). There seems no desire to improve their condition; "Kanakas no like work, Kanakas like sit in house," was the ingenuous reply given by one of them, when my husband pointed out the good results which would accrue from planting some trees in village territory.

Perhaps the greatest barrier to native progress lies in the absence of security of property; they steal freely from one another, as well as from white men, so that all individual effort is rendered nugatory. At the same time they are curiously lacking in pugnacity, and if detected in theft quietly desist or return the property: as a typical instance our cook once met a man wearing one of his, Bailey's, ties; he looked steadily at him, the man's hand went up, he took off the tie and handed it back. Their own native organisation was peculiarly lax, no kind of justice being administered, and they have never had for any duration the civilising effect of religious instruction or civil power. The missionaries were replaced by a native lay reader; there is a large church where services are regularly held, which form important functions for the display of best clothes, but it is difficult to say how much they convey to the worshippers. The older ones, at any rate, have two names, both a native and Christian appellation. Mr. Edmunds had, on our arrival, the status of a Chilean official, and was both just and kind in his dealings, but he had no means of enforcing order; the two policemen who had been at one time on the island had been withdrawn owing to their own bad conduct. The marvel is not that the Kanakas are troublesome, but that they are as good as they are.

We had heard in Chile rumours of native unrest, owing to the action of a white man, who had been for a short while on the island, and who had done his best to undermine the authority of the Manager. We had before long unpleasant evidence that they were out of hand. The wool-shed, which contained our minutely calculated stores, was broken into, and a quantity of things stolen, the most lamented being three-fourths of the stock of soap; no redress or punishment was possible. On June 30th, while we were still at the Manager's, a curious development began which turned the history of the next five weeks into a

Gilbertian opera—a play, however, with an undercurrent of reality which made the time the most anxious in the story of the Expedition. On that date a semi-crippled old woman, named Angata (fig. 30), came up to the Manager's house accompanied by two men, and informed him that she had had a dream from God, according to which M. Merlet, the chairman of the Company, was "no more," and the island belonged to the Kanakas, who were to take the cattle and have a feast the following day.[1] Our party also was to be laid under contribution, which, it later transpired, was to take the form of my clothes. Later in the day the following declaration of war was formally handed in to Mr. Edmunds, written in Spanish as spoken on the island:

"*June* 30*th*, 1914.

"SENIOR EMA, MATAVERI,

"Now I declare to you, by-and-by we declare to you, which is the word we speak to-day, but we desire to take all the animals in the camp and all our possessions in your hands, now, for you know that all the animals and farm in the camp belong to us, our Bishop Tepano gave to us originally. He gave it to us in truth and justice. There is another thing, the few animals which are in front of you,[2] are for you to eat. There is also another thing, to-morrow we are going out into the camp to fetch some animals for a banquet. God for us, His truth and justice. There is also another business, but we did not receive who gave the animals to Merlet also who gave the earth to Merlet because it is a big robbery. They took this possession of ours, and they gave nothing for the earth, money or goods or anything else. They were never given to them. Now you know all that is necessary.

"Your friend,

"DANIEL ANTONIO,

"*Hangaroa.*"

If some of the arguments are probably without foundation, as, for example, that regarding native rights in the cattle, they were at least, as will be seen, of the same kind which have inspired

[1] The natives of Easter hold very firmly the primitive belief in dreams. If one of them dreamt, for example, that *Mana* was returning, it was retailed to us with all the assurance of a wireless message.

[2] The milch-cows.

risings in many lands and all ages. The delivery of the document was immediately followed by action. The Kanakas went into "the camp," eluding Mr. Edmunds, who had gone in another direction, and secured some ten head of cattle. The smoke from many fires was shortly to be seen ascending from the village, and one of our party was shown a beast which was to be offered to us in place of our stolen property, "God" having apparently reversed his message on the subject of our contribution to the new republic. The next few days there was little more news "from the front," save that Angata, the old woman, had had another dream, in which God had informed her that "He was very pleased that the Kanakas had eaten the meat and they were to eat some more." A week later, riding home through the village, I saw a group on the green engaged in dressing a girl's hair; on inquiry it was found that she was to be married next day. Congratulations had hardly been expressed, when another young woman was pointed out who was also to change her state at the same time, and another and another, till the prospective brides totalled five in all. The idea, it seemed, was prevalent, that if punishment was subsequently inflicted for the raids, it was the single men who would be taken to Chile, hence this rush into matrimony, undeterred by the fact that Mr. Edmunds, in his capacity as Chilean official, had declined for the present to perform the civil part of the ceremony. The wedding feast was, of course, to be furnished by the sheep of the Company. Unfortunately, under such circumstances, it seemed hardly loyal to our host to attend the multiple wedding, which was duly solemnised in the church next day.

Meanwhile, the white residents had, of course, been considering their position, and in orthodox fashion, counting the number on which they could rely in an emergency. Beside Mr. Edmunds there were at this time in our party, myself and five men: S., Mr. Ritchie, the photographer, the cook, and a boy from Juan Fernandez. There were about half a dozen more or less reliable Kanakas, including the native Overseer and the village Headman, but everyone else was involved. Mr. Edmunds's position as custodian of the livestock was unenviable, and ours was not much more pleasant. After much thought we strongly dissuaded him from taking any action; if he interfered, there would be an affray. The natives were said to have a rifle and

some pistols; it was doubtful how many would go off, but there would anyway be stone-throwing: if he was then forced to shoot, the only deterrent possible, he would have to continue till resistance was entirely cowed, or all our lives would remain in danger. His personal safety was however another matter, and our party therefore accompanied him in an attempt to frustrate a raid, but this obviously could not be continued if our work was to be accomplished. We were strengthened in adopting a waiting policy by the fact that, most fortunately, a fortnight earlier a passing vessel had left us newspapers; they confirmed the news heard in Chile that the naval training-ship, the *Jeneral Baquedano*, whose visits occurred at intervals of anything from two to five years, was shortly leaving for Easter Island. We could only hope her arrival would be soon.

S. suggested that, being an unofficial person, he might meanwhile try the effect of negotiations; for the raids were continuing, and the head of cattle killed on one day had risen to fifty-six, including females and young. He therefore went down to the village, assembled the natives, and offered the company a present of two bullocks a week, if they would refrain from taking any more stock till the arrival of the warship, when the whole matter could be referred to the captain. The audience laughed the suggestion out of court, for "the whole of the cattle," they said, belonged to them, as God had told Angata, but they would let our party "have twenty" if we wished; as for Mr. Edmunds, "he is a Protestant, and therefore, of course, has no God."

When my husband returned saying he had accomplished nothing, I felt that it was "up to me." "This," I said, "is a matter requiring tact, and is therefore a woman's job; *I* will go and see the old lady." I had already received from her an embarrassing present of fowls, which, after referring the matter to our host, it had seemed better to accept. Not without inward trepidation, I rode down to the village, taking the Fernandez boy as interpreter, for many of the natives speak a smattering of Spanish. The place was a perfect shambles, joints of meat hanging from all the trees, and skins being pegged out to dry on every hand, but the raiders had been displaying energy in rebuilding the wall round the church. The Prophetess was with a group outside the house of the acting priest, who was her

BAILEY, THE COOK, ON GUARD.

EASTER ISLAND WOMEN.
Parapina standing.

FIG. 30.

ANGATA, THE PROPHETESS.

son-in-law; she was a frail old woman with grey hair and expressive eyes, a distinctly attractive and magnetic personality. She wore suspended round her neck some sort of religious medallion, a red cross, I think, on a white ground, and her daughter who supported her carried a small picture of the Saviour in an Oxford frame. She held my hand most amiably during the interview, addressing me as "Caterina." I had brought her a gift and began by thanking for the fowls. She refused all payments, saying "Food comes from God, I wish for no money," and proceeded to offer me some of the meat. This gave an opening, and in declining I besought her not to let the Kanakas go out again after the animals, for Mr. Edmunds said he would shoot if they did, and there would be trouble for them when the *Baquedano* came. As I spoke of the raids her face hardened and her eyes took the look of a fanatic; she said something about "God" with the upward gesture which was her habit in speaking His name. I hastened to relieve the tension by saying that "We must all worship God," and was happy to find that I was allowed a share in the Deity. Her manner again softened, and looking up to heaven she declared, with an assured confidence, which was in its way sublime, "God will never let the Kanakas be either killed or hurt." The natives were, in fact, firmly persuaded that no bullet could injure them. As for myself, Angata would, she said, "pray" for me, adding, with a descent to the mundane, that if ever she had "chickens or potatoes," I should be the first to have them. It was impossible to reason further; we parted the best of friends, but the "tactful" mission had failed!

This was the state of affairs when we decided that we must transfer our work and consequently our belongings to the other end of the island. Our surveyor and photographer remained, however, at Mataveri, as the accommodation there was more convenient for their occupations, so Mr. Edmunds was not alone. Moving camp, levelling ground, and building walls, were not light matters, when the Kanakas had found such much more interesting employment, but at last it was accomplished, and then came the question of the stores, which after the robbery at the woolshed had been taken to Mataveri. After much consultation it was decided to remove them to Raraku, as on the whole safer than leaving them at the Manager's house, which might, by the

look of things, be any day looted or burnt down. But when the ox-cart had been carefully loaded up with the numerous boxes and goods, the cash supply, consisting of £50 of English gold and some Chilean paper, being carefully hidden amongst them, a spell of bad weather set in. It was impossible to move the cart, and our possessions sat there day after day most handily arranged for the revolutionists if their desires should turn that way.

Our new camp we were often obliged to leave without defence save for the redoubtable Bailey, who had also served as guard at Mataveri (fig. 28). There had been no demonstration against us so far, but of course the future was unknown, and I never came in sight of our house, on returning from any distant work, without casting an anxious glance to see if it were still standing. We always went about armed, and the different ranges for rifle-shot were measured off from my house and marked by cairns, which will no doubt in future add yet one more to the mysteries of Easter Island.

One day I had just come back from a stroll, when the cry was raised "The Kanakas are coming," and a troop of horsemen, about thirty strong, appeared on the sky-line some four hundred yards distant. Fortunately S. was at hand, we hurried inside my house, shut the lower half of its door, which resembled that of a loose-box, and carelessly leant out. Any unpleasantness could then only be frontal; at the same time all weapons were within easy grasp, though not visible from the outside.

It soon, however, became clear that the visitors were approaching at a walk only, from which it was gathered their intentions were friendly. Nevertheless it was a relief when, as they got nearer, they raised their hats and gave a cheer; they then formed a semi-circle round the door and dismounted. The "priest" who was with them, and who carried a picture of the Virgin, read something, presumably a prayer, at which the company crossed themselves. He then gave greetings from Angata, and a message from her to say that *Mana* was returning safely with letters on board, and the men presented from their saddle-bows, eggs, potatoes, and about a dozen hens. The position was unwelcome, but as none of the goods were stolen, it seemed better to accept, and discharge the obligation as far as possible by giving in return what European food we could spare.

We subsequently informed Mr. Edmunds, and sent a message to the Prophetess that, as our camp was out of bounds, the Kanakas must not come without leave. The old lady herself, however, kept sending to us for anything she happened to want, and as the requests continually grew in magnitude the breaking-point seemed only a question of time. One of the earlier demands, to which Mr. Edmunds thought it advisable we should accede, was for material for a flag for the new Republic ; later, it floated proudly as a tricolour, made of a piece of white cotton, some red material from the photographic outfit, and a fragment of an old blue shirt.

Elsewhere things went from bad to worse, and it seemed as if the expected warship would never arrive. Word came that the Kanakas had ordered the native overseer to leave his house, the only one outside the village, and were taking away the servants of the Manager; our photographer wrote that he "dared not come over as their lives were being threatened"; and finally, one afternoon we received a note from Mr. Edmunds, saying, that "he could not leave the place as the Kanakas were talking of coming up in a body to the house." They were also, as we later learnt, threatening to kill him if he resisted their taking possession. It was obvious that the crisis had arrived; that we must risk leaving the camp and go into Mataveri. We talked over every conceivable plan of campaign, but it was too late to do anything that night, and I remember that, finally at dinner, to turn our thoughts, we discussed the curious manner in which some of the statues had fallen. In four cases which we had seen that day, while the body lay on its front, the head had broken off in mid air, turned a complete somersault, and rested on its back with the crown towards the neck. The next morning, August 5th, I awoke early and recorded in my journal the events of the day before. "Of course," I added, "if it were a stage play, just as the crisis arrived there would be cries of 'the *Baquedano* is here,' and the curtain would fall. But, alas! it is not." Scarcely was the ink dry—only it was pencil—when a man rode up waving a note from Mr. Edmunds, and shouting, "A ship!—a ship!" The previous afternoon, as the Kanakas were assembling in the village to go up to Mataveri, the *Baquedano* had been sighted, and four of the ringleaders were now in irons. I scarcely knew how great had been the long strain till the relief came.

Our rejoicings, however, we found to have been partly premature. The warship had unfortunately brought with her large gifts of clothes for the natives from well-wishers in Chile. Some little while before attention had been drawn to the inhabitants of Easter, by an Australian captain who had touched there on his homeward voyage. The natives had, as usual, come off to his ship in their oldest garments; he had been impressed with their ragged condition and made a collection of clothes for them in Australia amounting to many bales, but on his next voyage to Chile he had been unable to touch again at the island and had left them at Valparaiso. We had been asked to bring these bales, but had declined on the score of space.[1] The Chileans disliked the idea of their protectorate being indebted to strangers, made a collection on their own account, and despatched them by the *Baquedano*. It seemed unthinkable that people, every one of whom for weeks had been consuming stolen goods, and who, two days before, had been on the verge of murder, should be immediately presented officially with the commodity they most prized. I therefore went on board the *Baquedano*, saw the Captain, and ventured to request that the goods should be handed over to us, promising personally to visit every house before our departure, ascertain the needs of the people, and distribute the articles. "Surely," he said, "you shall have them." Within a few hours they had been distributed by his officers on the beach. Some of the garments were useful, but an assortment of ball-slippers seemed a little out of place, and the greater part of the community, men and women, blossomed out into washing waistcoats. The stolen sheepskins, or some of them, were returned, but three of the four ringleaders were set at liberty, and no corporate punishment was inflicted; indeed, the Captain had told me he considered that the natives had "behaved very well not to murder Mr. Edmunds" prior to our arrival.

Before the ship left the island, the Captain wrote officially to the "Head of the British Scientific Expedition" to the effect, that the action he had been obliged to take to restore order would probably have the result of rousing more feeling against

[1] Considerably later *Mana* was again approached on the subject of the Australian gifts, and Mr. Gillam consented to bring them; it then transpired that they were no longer available, having "been given by the wife of the head of the Customs to the deserving poor of Valparaiso."

foreigners; he therefore could not guarantee our safety and offered us passages to Chile—an offer which, needless to say, we declined. So ended the Revolution; we felt with interest that the confidence of the Prophetess had been justified, at any rate as far as 249 Kanakas were concerned out of the 250.

The old lady died six months later; I attended her funeral. The coffin was pathetically tiny, and neatly covered with black and white calico. A service was first held in the church where, during the rising, she used to take part in the assemblies and address her adherents. There figured prominently in the ceremony a model of the building and also two prie-dieu, roughly made of boards, one of which she had used in private, the other in public worship. She was laid to rest beneath the great wooden cross, which marks the Kanaka burying-ground, between the village and the bay. I stood at a little distance watching gleams of sunshine on the great stones of the terrace of Hanga Roa and on the grey sea beyond, and musing on the strange life now closed, whose early days had been spent in a native hut beneath the standing images of Raraku. My attention was recalled by an evident hitch in the proceedings: difficulty had arisen in lowering the coffin, owing to the fact that the prie-dieu was also being fitted into the grave. When all had been finally adjusted and the interment was completed, a sound was heard, unusual in such circumstances—three English cheers—hip, hip, hooray; the natives had learnt it from passing ships and esteemed it an essential part of a ceremony. The company was not large for the obsequies of one who had so recently been the heroine of the village, and on asking in particular why a certain near relative was absent, the answer received was that "there was to be a great feast of pigs, and he was busy preparing it"; doubtless others were similarly detained.

During the remainder of our sojourn there were, as will be seen, additional white men on the island. The Kanakas were occupied in various ways and there was no further open demonstration, but their independence and demands increased daily. Since we left, a white employé of the Company has been murdered by them and thrown into the sea.

CHAPTER XII

A GERMAN BASE

MANA appeared on August 23rd, a week after the warship left, and not before we had become a little anxious about her. She had done the passage to the mainland in eighteen days, establishing a record, but had had bad luck on her return journey, the voyage having taken forty-one days. Even after her arrival there was the usual chase to get hold of her, and we did not receive the mail till late one night. We had had no letters since we left Talcahuano the preceding February, and read them eagerly during the small hours; it was the greatest relief to find that all at home was well. The yacht had to put out again to sea before the newspapers could be landed, but we later received in them the accounts of the murder of the Austrian Archduke and Duchess; even then, of course, Ireland and labour troubles loomed much more largely on the political horizon. As soon as the return mail was ready, on September 4th, we despatched *Mana* again, the instructions sent home being that everything was to be sent to Tahiti, as we expected to get off when she once more returned the following November.

The *Baquedano* had brought some additions to the community on the island: one or two Europeans to work on the estate and a German to plant tobacco. The fact that the presence of this last coincided with the declaration of the war, and the subsequent use of the island by his nation as a naval base, gave rise later to a good deal of comment; it is certain that but little effort was made to grow tobacco. He left shortly before we did. A schoolmaster from Chile was also among the newcomers; he was sent by the Government, and brought an expensive school building. In this he entertained us all to celebrate the day of Chilean Independence, September 18th, when the natives gave some masque dances, a fashion imported from Tahiti. It was interesting to notice that the women always preferred to wear

for best occasions their own distinctive dress, rather than the smart clothes of the *Baquedano*, or similar gifts, which were relegated to every-day service; I have seen a really beautifully embroidered underskirt used for riding astride. The native garment is of any washing material, preferably white for Sundays. It falls straight and loosely down from a yoke, and is worn unreasonably long; the sleeves are made to the wrist, with puffs at the top (fig. 29). This fashion is said to be common throughout the South Seas, presumably dating from the first introduction of clothes by the missionaries.[1]

School was duly begun, but after a few days the children ceased to appear, the master declared he was "not an attendance officer," and from then till we left, nearly a year later, no school was held; the last we saw of the blackboard and counting-frame, they were rotting in a field some two miles off, where they had been taken by the French marooned sailors for use in some carnival pony-races. The warship also brought an epidemic of bad colds: every ship except *Mana* left some such legacy.

Now that peace was in some measure restored, we set to work to excavate some of the statues which stood on the slope of the Raraku mountain. The natives were entirely indifferent whether they worked or not, but by paying high wages and giving any quantity of mutton, we were able at this time to get a certain amount of precarious labour for digging and camp work. The whole lot, including my maid-servant, went in for every week-end to the village, and it was always a matter of anxiety to know whether they would ever return. Our Sundays were spent peacefully, doing housework, taking the ponies to water in the crater, changing their pitches at due intervals, and similar jobs.

We had just begun the week's work on Monday, October 12th, when word was brought that some steamers had appeared. The whole of the native staff, of course, at once departed to see what could be begged from the ships. The vessels turned out to be

[1] Since writing the above, the following account has been found of dress at Tahiti in 1877: "All the women, without exception, have their dresses cut on the pattern of the old English sacques worn by our grandmothers. . . . It is a matter of deep congratulation that the dress in fashion in Europe at the period when Tahiti adopted foreign garments should have been one so suitable."

"We may be thankful that Prince Alfred's strong commendation of the graceful sacque has caused it to triumph over all other varieties of changeful and unbecoming fashion which for a while found favour here."—*Cruise in a French Man-of-war*, Miss Gordon Cumming, pp. 299 and 284.

a German squadron, going, they said, "from the China station to Valparaiso." Some more turned up later, till there were twelve in all, four or five of the number being warships, and the remainder colliers or other smaller vessels. They kept entire silence on the European situation. We had not, of course, the slightest idea that war had broken out, still less that our lonely island was the meeting-place, cleverly arranged by Admiral von Spee, for his ships from Japan—the *Scharnhorst* and *Gneisenau*—with the other German warships in this region; the *Nürnberg* and *Leipzig* had turned up from the west coast of Mexico, and the *Dresden* from the other side of South America. A writer in the *Cornhill* (August 1917) states "there happened to be upon it [Easter Island] a British scientific expedition, but busied over the relics of the past, the single-minded men of science did not take the trouble to cross the island to look at the German ships." S. was, as a matter of fact, twice over at Mataveri while they were in Cook's Bay, but it is true of this "single-minded" woman, who felt she had something else to do than to ride for some four hours to gaze at the outside of German men-of-war. What did interest us was that presumably, after the usual manner of passing ships, the officers would come over to Raraku, and being intelligent Germans, would photograph our excavations. We therefore turned to, and with our own hands covered up our best things.

We seized the opportunity to write letters, which were posted on the ships, and one of our number went to see the doctor. To the credit of the enemy be it said, that almost all the letters subsequently arrived, a sad exception being a butterfly, addressed to Professor Poulton at Oxford, which, if, as may have been the case, it was retained as something valuable, presumably went down off the Falkland Islands. Mr. Edmunds, meanwhile, had not unnaturally rejoiced at having his market brought to his door, and sold the ships nearly £1,000 worth of meat. They offered to pay for it in gold, but it seemed common prudence to ask instead for an order, a decision which was later sadly lamented.

On Thursday some of our staff returned: the Germans were, it seemed, most unpopular; they did not come on shore and had given no food, clothes, or soap. Kanaka sentiment at this moment would have been certainly pro-Ally.

On Friday rumours reached us that there was something mysterious going on. Why, it was asked, did the Germans say they had no newspapers, so rarely come on shore, and go out at night without lights? and why did one officer say that "in two months Germany would be at the top of the tree"? We discussed the matter and passed it off as "bazaar talk." On Sunday, however, news came from Mataveri which we could no longer wholly discredit. The German tobacco planter had been on board, and the crew had disobeyed orders and disclosed to their countryman the fact that there was a great European war; the combatants were correctly stated, but much detail was added. Two hundred thousand men were, it was said, waiting at Kiel to invade England; the war had taken our country by surprise, and the German ships had already made a sudden raid and sunk eight or nine Dreadnoughts in the Thames; the Emperor was nearly at Paris, though the French continued to fight on most bravely. It was a terrible war as neither side would show the white flag. An army had been sent from England to the assistance of the French, but it had been badly defeated. The English Labour Party had objected to troops being sent out of the country, in consequence of which the Asquith ministry had fallen, the House of Lords came in somehow; anyway, England was now a Republic, and so were Canada and Australia; India was in flames, and two troopships had been sunk on the way there from Australia.

We are still inclined to think that the Germans themselves believed all these things; they had so often been told, by those in authority, that such would occur on the outbreak of war with England, that wishes had become facts. As a small mercy we got the news of the loss of the German colonies, but the *Scharnhorst*, which had just come from the French possession of Tahiti, said that the natives there having risen and killed the Germans, the warships had therefore bombarded the town of Papeete, which was now "no more." The reason given for keeping us in the dark so long was, that hearing there were foreigners on the island, they thought that we might fight amongst ourselves. Von Spee made exact inquiries as to the number of whites in the place, and told the Kanakas that when he returned he would hold them responsible for our safety. The real reason of the silence maintained was most probably to

prevent any question being raised of their use of the island as a naval base. When the news could no longer be concealed, the officers gave it as their opinion, that "when Germany had conquered France, peace would be made with England, in which case Britain would probably gain some territory as she had such good diplomatists," a compliment at least for Lord Grey. The reality of the war was brought home by the concrete fact that the ships were reliably reported to be in fighting trim, with no woodwork visible. That Sunday evening one of us saw the squadron going round in the dusk, the flagship leading. They had said that they would come again, but they never did. They went on their way to Coronel and the Falklands.

On Monday morning we met our photographer by arrangement on the road to Mataveri, in order to take some of the halfway terraces; he had brought two newspapers, which had at last been got hold of, and we sat down beneath a wall to read them. They were German ones, of September 15th and 17th, published in Chile, and contained little news; but we read between the lines that things were going better in France, for the Germans had made "a strategic retreat according to plan," and then the curtain fell on the great drama. The ground rocked for us, as it did at home in those first August days; it was just one week since we had covered up our diggings and it seemed centuries. How much to believe we did not know, but some of it sounded plausible, and when later we found that England was facing the struggle as a united whole, and that there was still a British Empire, we felt that the greatest nightmare of the war had passed.

From the personal point of view our thoughts turned, of course, to the yacht; she would no doubt remain in safety at Talcahuano, that was a comfort. At any other time it would have been a matter of anxiety that the crew should continue indefinitely without employment, and that there was no pecuniary arrangement there for so long a detention; as it was, we were so absolutely helpless that the futility of worrying was obvious. As regards ourselves, we could only cut down our use of such things as flour and tea, and wait; our experience of war rations thus came early. The most serious threatened shortage was that of paper. It was intensely strange to go back to digging out statues, when morning, noon, and night our hearts were

over the seas; but that was "our job," there was at least no daily and hourly waiting for news, and in the peace of a plain duty and the absolute silence of the sea around us there was a certain kind of rest.

For the next few weeks life went on quietly, sheep-shearing absorbed the energies of the community, and the village was laid low by an attack of dysentery, from which in a short time there were eight deaths: the disease was either a legacy from the Germans, or the result of the distribution of some more *Baquedano* clothes which had been left with the schoolmaster. It seemed as if we might spend the rest of our lives on the island, when suddenly, as things always happened in mid-Pacific, on December 1st, six weeks after the departure of the German squadron, a little ship turned up. She was flying the Chilean flag, but had an English captain, and was to take back word to Valparaiso how things were going on the island. She brought good news on the whole, but also the regretted tidings of the sinking of the *Good Hope* and *Monmouth* on November 1st. Mr. Gillam wrote that the yacht was, as we had expected, detained at Talcahuano till the passage was considered safe. The point which immediately concerned us was the offer of passages in this vessel to Chile should we desire them; but she could only by her charter stay some five days, during which time it would have been quite impossible, even had our work been finished, to transport our goods from Raraku. There was no room for hesitation: S. must go and look after *Mana*, and insure her against war risks. Mr. Ritchie and the Fernandez boy had already sailed on the *Baquedano*, and as the photographer's work on the island was nearly done for the present, it seemed best he should accompany my husband and resume his post on the yacht. Bailey and I were therefore left to represent the Expedition on the island.

When the good-byes had been said, it was better not to have time to think, so we at once set to work, packed up such things as were necessary from our country house, and transferred the camp back to Mataveri. There I took up life once more in my tent by the grave of the murdered manager. Mr. Edmunds would, I knew, kindly give me assistance in case of necessity, and it was desirable to be near the village, for I proposed to spend the time till S. returned in interviews with such of the old people

as could remember traditions and customs, prior to the coming of Christianity. This work was, however, not destined to continue undisturbed.

On Wednesday morning, December 23rd, another German ship came into Cook's Bay—the armed cruiser *Prinz Eitel Friedrich*. The Manager went on board, and returned with the information that the Captain had said he "would require thirty or forty beasts, but that as the crew would be busy next day they would not take them till after Christmas." They would give no account of themselves, nor any news of the war. It was a relief to realize that S. would not yet have had time to leave Chile, and that he and the yacht were presumably safe in harbour. That very afternoon, however, my writing was interrupted by a cry of congratulation from the native girls at work in Mr. Edmunds' kitchen, "*Mana* is coming." A woman, who had been up on the high ground, had reported that she had seen the little vessel off the south coast and that she was now sailing round Rano Kao, hence making direct for Cook's Bay. It might, of course, be a mistake, but it was, on the other hand, just possible that Mr. Gillam had seized an opportunity to slip across to the island without waiting for a reply to his letter. The immediate question, supposing that it was indeed *Mana*, was how she could be stopped walking straight into the jaws of the enemy. Bailey saddled in haste, and rode up to the top of the headland to try to warn her not to proceed. I armed myself with a towel and coat to make a two-flag signal, which denotes urgency, and fled down to the rocks on the coast below, selecting a point from which it was possible to command the furthest view, without being noticed from the cruiser. It was a very forlorn hope, that it might be possible to attract the yacht's attention before she was seen by the enemy, but it was obviously out of the question to continue, under a tree, copying notes while *Mana* might be at the moment meeting with a watery grave.

My thoughts, while I sat there with eyes glued to the horizon, went back to academic discussions with Admiral Fremantle on board a P. & O. liner only a few years before, on the right in war-time to capture private property at sea, and how little it had then occurred to me that the matter would ever become so vitally personal. I waited for two and a half hours,

not daring to leave, but with hope growing momentarily stronger that there was an error somewhere. Meanwhile, Bailey had seen the vessel from the mountain and was confident that it was the returning yacht, but had been unable to get into touch with her. He had come down and consulted with Mr. Edmunds, who had then most kindly ridden over to the south coast to see what could be done from there; the nearer view had made clear that the alarm was a false one, the vessel was not *Mana* but some other passing schooner, and we breathed once more.

Everyone, however, seemed to take particular pleasure in talking to the Germans about the yacht and her movements, in a way which to me was more amusing than reassuring. As a scientific ship, she theoretically shared with Red Cross vessels immunity under the Hague Convention, but even in those days, as will have been seen, that did not bring complete confidence. One of the German officers had, I was told, given it as his opinion that his Captain would not touch her, but "it was," he remarked, "a matter for individual judgment, and other commanders might act differently." The same officer expressed his surprise that the Manager had ventured on the cruiser, as he "might have been made a prisoner, as a German had been on a French ship"; whereupon Mr. Edmunds naturally resolved not to accept an informal invitation to attend theatricals to be held on board on Christmas Eve.

The reason for the occupation of the crew soon became obvious. The warship went out on the following morning and returned with a French barque, the *Jean*, which she had captured some time before, and which, being laden with coal, she had towed most of the way to the island. She laid the barque alongside her in Cook's Bay and proceeded to hoist out the cargo (fig. 24), finally shooting away the masts and spars in order that the French ship might not capsize as she gradually lost her ballast.

The cruiser, it transpired, had also on board it the crew of an English sailing-ship, the *Kildalton*, which she had captured and sunk near the Horn; but when an attempt was made to speak to the men, they were ordered below. The German officers and crew then landed daily, rode over the island, came up to the Manager's house, and generally behaved as if the whole place belonged to them. The officers were courteous and always saluted when we met, an attention with which one would have

preferred to dispense; one of the crew penetrated to our kitchen, which he was at once requested to leave, in spite of Bailey's evident fear that he and I would immediately be ordered out for execution; the man hesitated, looked astonished, but obeyed. It must be remembered that there was no reason to suppose that it was otherwise than civilised warfare, the idea that anyone could or would injure non-combatants on neutral soil never seriously occurred to me; the story of Belgium was unknown.

Indignation was, however, roused by the fact that the Germans were remaining far beyond the twenty-four hours to which they were entitled in a neutral port, and obviously again using the island as a base. It grew to fever-heat when news came that a signal-station had been erected on Rano Aroi, the high central point, with an officer and men in charge, from which notice might be given to the cruiser below if an "enemy" ship was sighted. I took Juan, the headman of the village who was our usual escort, rode up to the point in question, and thus verified the fact of the station and men on watch. I remained at a short distance, but Juan went on and spoke to the Germans; he came back to me saying impressively, "They do not like to see you here," to which sentiment the reply naturally was "I dislike still more to see them." Never would the white ensign have been more welcome! To relieve my feelings, although with a sense of futility, I wrote a formal protest, under the grandiloquent title of "Acting Head of the British Scientific Expedition," pointing out for the benefit of the Chilean Government these abuses of neutrality. The schoolmaster had been, since his arrival, the formal representative of his country, and I went down to the village to give it to him; its presentation was delayed by his having gone on board the cruiser for the Christmas theatricals, where he remained over the next day, but it was finally handed to him.

On New Year's Eve I was coming in from a business ride about 1 o'clock, and, having breakfasted at 6, was feeling not a little hungry, when the German ship was seen steaming from her anchorage, looking as she did so like a great blot on the radiant sea. The first impression was that she was leaving the island, but on observing more closely, her errand was apparent; she was not alone, but had the graceful little barque with her, towing her side by side in a last Judas embrace. Naturally, one

could go no farther, and for two and a half hours a little company, including the crew of the doomed ship, who had just been landed, sat spell-bound on the cliff watching the tragedy. When the cruiser had gone a short distance, but well within the three-mile limit, she cast the French vessel adrift, the small craft rolled helplessly, high out of the water, without ballast or cargo, and with only a mizzen-mast remaining. The warship then swooped round in great circles like an evil bird of prey, and every time that she came broadside on she fired at her victim. The first shot missed; the second went through the upper part of the barque into the sea the other side. The third shot obviously told, but the executioner fired once again and then ceased, satisfied with her work, for the little ship could be seen gradually regaining her water-line, though with an ominous list, and a ballast never designed by the builder. As she sank she drifted slowly southward, at the mercy of wind and current. The cruiser moved with her, keeping at an even distance and steadily watching her victim till suddenly the end came, and where there had been two vessels on the blue sea only one remained. Another gallant ship had joined the company of ghosts in the ocean Hades below.

When she had thus accomplished her work, the *Eitel Friedrich* departed, having taken on board stores, which would, she stated, with those already in hand, last her till the following April. She kept her prisoners on board till almost the last, in order to serve, it was said, as hostages should a British warship appear, and then deposited them all on shore. Our feelings on thus finding our island invaded, resembled, in some measure, the classical ones of Robinson Crusoe on a somewhat similar occasion; the new-comers consisted of the captains and crews of both the English and French ships, forty-eight persons in all. They had been well treated on the cruiser, and were given on landing the remaining stores out of the sunken barque. A camp was made for them in the wool-shed, near the landing-place at Hanga Piko, and formed a great attraction to the natives who flocked there hourly to see what could be picked up. A room was found for the captain of the English ship in the Manager's house, where he made a pleasant addition to the party. The charms of Easter Island did not appeal to him, and he was naturally concerned for the anxiety which would be felt at home when his ship was

reported "missing." His great occupation was to walk, many times a day, to the top of the knoll behind my tent, to try to catch sight of a sail, a hope which those of us who were better acquainted with the island felt to be somewhat forlorn.

Unfortunately, the epidemic of dysentery which had prevailed in the island since the previous October, laid low some of the sailors. This was a serious anxiety, as there was no doctor of any kind, and the only medical stores and books were those of the Expedition, which had to be routed out from our camp at the other end of the island. One young Englishman, named Campbell, to our great regret, succumbed to the disease; he was "the only son of his mother, and she was a widow"; a little white cross in the Easter Island burial-ground makes yet another memorial of the Great War. Captain Sharp's persistent look-out was rewarded sooner than might have been expected; false hopes were raised by a vessel which went on without waiting, but when the marooned men had been with us some two months, a Swedish steamer appeared. She had come out of her way attracted by the fame of the antiquities, and it was a pleasure to show one or two of the officers what little could be seen of those statues near Cook's Bay. She kindly took on board the English crew and the greater part of the Frenchmen, but a few of the latter preferred to remain, on the ground that they had "sent word to the French Consul at Valparaiso, and must await his directions." It was said that, prior to leaving the *Eitel Friedrich*, they had signed an undertaking never to bear arms against Germany, and they were consequently not anxious to find themselves again in France, where their position might be invidious. One of them, who hailed from the French West Indies, subsequently married his hostess, a lady in the village. The wedding was celebrated in the church and largely attended; during a great part of the service the couple sat on a low form before the altar, with the arm of the bridegroom round the waist of the bride; the ceremony was followed by a sumptuous and decorous repast.

Such an excitement as the German visit had of course upset my grown-up children, but we gradually resumed our talks. The ways, means, and result of those conversations will come more appropriately under the heading of the scientific work. It took, as a rule, about the same number of hours to copy out

the rough notes of an interview as to get the substance; if, therefore, the morning had been given to talk, the afternoon was spent in writing. It soon became obvious that it was going to be a race against time to get all the information available before *Mana* returned, especially as the interviews involved a certain amount of strain, and it was better, in the interests of all, to diversify them with topographical and other work. In this sense every day was prized which the yacht delayed her return, and there was little opportunity for feeling lonely, at any rate during working hours. The time, however, began to grow long. January changed into February, and February turned into March, and there was still no news of her; everyone began to inquire if I were "not becoming very anxious," in a manner which was truly reassuring. And now, in approved fashion, we will turn and see what was happening to the other part of the Expedition.

After leaving the Raraku camp S. had ridden in to Cook's Bay, and there had difficulties about getting on board, for the Kanakas had made one bargain for the use of their boat, and then wanted double; during the delay rain came on, and he was obliged to shelter himself and his goods in the native boat-house by the landing. He at length, however, reached the ship, where the captain gave him his own cabin under the bridge. At tea-time the first officer, who was of German nationality, came out of his cabin and conversed in such a way that it was obvious that he was not altogether sober; the captain soon came along, rated him for drinking, told him the curse of the sea was alcohol, and he was to go at once on deck. Upon which the mate ascended to the bridge, groaning deeply. Now the said captain had, unfortunately, on board sixteen cases of whisky, which he had brought to trade at Easter, but which Mr. Edmunds had not allowed him to land. He himself shortly began to drink steadily, and went on till delirium tremens supervened, and he became obsessed with the idea that there was an affray going on between the sailors and stewards. By the arrangement of the vessel, the crew were berthed for'ard and the stewards aft, while the waist of the ship was filled by a stack of coal, which had been left on deck, to save the trouble of stowing it in the bunkers, and in the pious hope that no bad weather would supervene. On the top of this coal the captain now took his stand, declared that

he would have no fighting on his ship, and hurled pieces of coal first at an imaginary crew for'ard and then at supposititious stewards aft; though all hands were in reality carefully lying low to keep out of his way.

S., meanwhile, was unfortunately confined to his cabin, having gone down, about the second day out, with a very severe attack of dysentery; the epidemic on the island had never reached our camp; he had presumably contracted it during the delay in starting. His position was anything but enviable: there was no steward, only a cabin-boy, well-meaning, but languid and very dirty. He could get no food which he could take, and lay there helpless with the rats eating his clothes; if it had not been for the kindness of the chief engineer, who looked in occasionally, it seems doubtful if he would have lived to reach Chile. To this pleasing state was now added the apprehension that the captain, who was wandering about by day and night, might at any moment attack him for being in the cabin, in anticipation of which event S. kept a loaded revolver under his pillow. At last things got to such a state that the chief engineer came and asked his advice on the desirability of screwing up the skipper, Oxford fashion, and passing his food through the port. Before, however, this step could be taken, the offender had reached the stage of mental collapse, melted into tears and spent his time in protracted prayers, beseeching the engineer to put the accursed stuff overboard. S. naturally advised taking him at his word, when it was found that he had been drinking at the rate of nearly three bottles a day.

All this time the German mate had been obliged, to his great annoyance, to keep sober for the sake of his own safety, but as they approached Juan Fernandez there was much anxiety on board, for no one was very sure where it was, and they wanted to see it without hitting it; by good luck it was fortunately sighted during the hours of daylight. They managed, somehow, to reach Valparaiso, and S. was at once taken to the same English hospital to which Mr. Corry had been removed. Here he lay for weeks, delighted to be well nursed and comfortable, and when convalescent, was most hospitably entertained by our friend Mr. Hope-Simpson, till he was equal to going down to Talcahuano to see after the yacht.

On February 20th, 1915, *Mana*, now duly insured, sallied

forth once more, having lain at Talcahuano for nearly five months. Von Spee's squadron had been annihilated off the Falkland Islands on December 8th, and though the exact whereabouts of his sole remaining ship, the *Dresden*, were still unknown, the coast was thought to be clear. As a matter of fact, the cruiser had crept out of her hiding-place in the Patagonian Channels sixteen days earlier, and was at this time not far from the entrance to the bay, where she was no doubt apprised by wireless from the shore of the movements of all shipping. Luckily the yacht's departure was delayed at the last by some parting arrangements, and she left port some hours later than had been intended; in the interval, according to information subsequently received, another ship went by, the cruiser captured her and went off. Thus did *Mana* pass by in safety, and before she reached Easter Island the *Dresden* had met with her doom at Juan Fernandez.

March 15th was a joyful day, when the yacht at length turned up all safe and sound. We rapidly decided that the best thing we could do would be to let the British Representative in Chile know at once of the call of the *Eitel Friedrich*, and of the use made of the island by the Germans, more particularly as there were recent reports from more than one quarter that a vessel with two funnels had been seen off the island. A despatch was therefore written for our Minister at Santiago, and Mr. Gillam was instructed to hand it with a covering letter to the British Consul at Valparaiso. The enemy might turn up any day, and, in view of the gossip there had been about the yacht when they were here before, it was obviously desirable to maintain secrecy as to her whereabouts. No one save the Sailing-master, therefore, was informed of her destination; she lay for two nights off Hanga Roa, and on the third morning she was gone. On her arrival at Valparaiso the Consul requested Mr. Gillam to take the despatch himself to Santiago in order to answer any questions in his power; this he did, and had a long interview with the British Minister. We have subsequently received kind acknowledgment from the Admiralty of our efforts to be useful. The yacht then returned to the island,[1] where we had been doing last things, including finishing off our excavations, in which we

[1] *Mana* made seven trips in all between Chile and Easter Island, traversing, in this part alone of her voyage, over 14,000 miles on her course.

were very kindly assisted by some of the remaining members of the French crew; they worked for us at a rate of pay refused by the natives. The packing-up of specimens alone was no light business. There had turned out to be much more work to be done on the island than we had anticipated, and though our residence had been prolonged far beyond the time originally contemplated, we had, from the scientific point of view, been largely single-handed and had also been hindered by circumstances. So far as research was concerned we would gladly have remained for another six months, to write up results and make good omissions; but England was at war, the three years our crew had signed-on for would shortly expire, our wonderful time was over, and we must go.

PREHISTORIC REMAINS

AHU OR BURIAL-PLACES

STATUE AT THE BRITISH MUSEUM.

(Back of statue, Fig. 106.)

CHAPTER XIII

PREHISTORIC REMAINS

AHU OR BURIAL-PLACES

Form of the Easter Island Image—Position and Number of the Ahu—Design and Construction of the Image Ahu—Reconstruction and Transformation—The Semi-pyramid Ahu—The Overthrow of the Images and Destruction of the Ahu.

In many places it is possible in the light of great monuments to reconstruct the past. In Easter Island the past is the present, it is impossible to escape from it; the inhabitants of to-day are less real than the men who have gone; the shadows of the departed builders still possess the land. Voluntarily or involuntarily the sojourner must hold commune with those old workers; for the whole air vibrates with a vast purpose and energy which has been and is no more. What was it? Why was it? The great works are now in ruins, of many comparatively little remains; but the impression infinitely exceeded anything which had been anticipated, and every day, as the power to see increased, brought with it a greater sense of wonder and marvel. "If we were to tell people at home these things," said our Sailing-master, after being shown the prostrate images on the great burial place of Tongariki, "they would not believe us."

The present natives take little interest in the remains. The statues are to them facts of every-day life in much the same way as stones or banana-trees. "Have you no *moai*" (as they are termed) "in England?" was asked by one boy, in a tone in which surprise was slightly mingled with contempt; to ask for the history of the great works is as successful as to try to get from an old woman selling bootlaces at Westminster the story of Cromwell or of the frock-coated worthies in Parliament Square. The information given in reply to questions is generally wildly mythical, and any real knowledge crops up only indirectly.

Anyone who is able to go to the British Museum can see a typical specimen of an Easter Island statue, in the large image which greets the approaching visitor from under the portico (fig. 31). The general form is unvarying, and with one exception, which will be alluded to hereafter, all appear to be the work of skilled hands, which suggests that the design was well known and evolved under other conditions. It represents a half-length figure, at the bottom of which the hands nearly meet in front of the body. The most remarkable features are the ears, of which the lobe is depicted to represent a fleshy rope (fig. 58), while in a few cases the disc which was worn in it is also indicated (fig. 59). The fashion of piercing and distending the lobe of the ear is found among various primitive races.[1] The tallest statues are over 30 feet, a few are only 6 feet, and even smaller specimens exist. Those which stood on the burial-places, now to be described, are usually from 12 to 20 feet in height, and were surmounted with a form of hat.[2]

Position and Number of Ahu.—In Easter Island the problem of the disposal of the dead was solved by neither earth-burial nor cremation, but by means of the omnipresent stones which were built up to make a last resting-place for the departed. Such burial-places are known as "ahu," and the name will henceforth be used, for it signifies a definite thing, or rather type of thing, for which we have no equivalent. They number in all some two hundred and sixty, and are principally found near the coast, but some thirty exist inland, sufficient to show that their erection on the sea-board was a matter of convenience, not of principle. With the exception of the great eastern and western headlands, where they are scarce, it is probably safe to say that, in riding round the island, it is impossible to go anywhere for more than a few hundred yards without coming across one of these abodes of the dead. They cluster most thickly on the little coves and their enclosing promontories, which were the principal centres of population. Some are two or three hundred yards away from the edge of the cliff, others stand on the verge; in the lower land they are but little above the sea-level, while on the precipitous part of the coast the ocean breaks hundreds of feet below.

[1] For an illustrated description of the method of expanding the ear, see *With a Prehistoric People, the Akikuyu of British East Africa*, p. 32.

[2] A full description of the statues is given in chap. xiv.

It was these burial-places, on which the images were then standing, which so strongly impressed the early voyagers and whose age and origin have remained an unsolved problem.

During the whole of our time on the island we worked on the ahu as way opened. Those which happened to lie near to either of our camps were naturally easy of access, but to reach the more distant ones, notably those on the north shore, involved a long expedition. Such a day began with perhaps an hour's ride; at noon there was an interval for luncheon, when, in hot weather, the neighbourhood was scoured for miles to find the smallest atom of shade; and the day ended with a journey home of not less than two hours, during which an anxious eye was kept on the sinking sun. The usual method, as each ahu was reached, was for S. to dismount, measure it and describe it, while I sat on my pony and scribbled down notes; but in some manner or other every part of the coast was by one or both of us ridden over several times, and a written statement made of the size, kind, condition, and name of each monument.

Unfortunately there is in existence no large-scale plan of the coast, a need we had to supply as best we could; map of Easter Island there is none, only the crude chart; the efforts of our own surveyor were limited, by the time at his disposal, to making detailed plans of a few of the principal spots. The want is to be regretted geographically, but it does not materially affect the archæological result. We were always accompanied by native guides in order to learn local names and traditions, and it was soon found necessary to make a point of these being old men; owing to the concentration of the remains of the population in one district, all names elsewhere, except those of the most important places, are speedily being forgotten. The memories of even the older men were sometimes shaky, and to get reasonably complete and accurate information the whole of a district had, in more than one case, to be gone over again with a second ancient who turned out to have lived in the neighbourhood in his youth and hence to be a better authority.

Original Design and Construction of Image Ahu.—The burial-places are not all of one type, nor all constructed to carry statues; some also are known to have been built comparatively recently, and will therefore be described under a later section. The image ahu are, however, all prehistoric. They number just

under a hundred, or over one-third of the whole.[1] The figures connected with them, of which traces still remain, were counted as 231, but as many are in fragments, this number is uncertain.

A typical image ahu (fig. 36) is composed of a long wall running parallel with the sea, which, in a large specimen, is as much as 15 feet in height and 300 feet in length; it is buttressed on the land side with a great slope of masonry. The wall is in three divisions. The main or central portion projects in the form of a terrace on which the images stood, with their backs to the sea; it is therefore broad enough to carry their oval bed-plates; these measure up to about 10 feet in length by 8 feet or 9 feet in width, and are flush with the top of the wall. On the great ahu of Tongariki there have been fifteen statues, but sometimes an ahu has carried one figure only.

The wall which forms the landward side of the terrace is continued on either hand in a straight line, thus adding a wing at each end of the central portion which stands somewhat farther back from the sea (fig. 41). Images were sometimes placed on the wings, but it was not usual. From this continuous wall the masonry slopes steeply till it reaches a containing wall, some 3 feet high, formed of finely wrought slabs of great size and of peculiar shape; the workmanship put into this wall is usually the most highly finished of any part of the ahu. Extending inland from the foot of this low wall is a large, raised, and smoothly paved expanse. The upper surface of this, too, has an appreciable fall, or slope, inland, though it is almost horizontal, when compared with the glacis.

By the method of construction of this area, vault accommodation is obtained between its surface pavement and the sheet of volcanic rock below, on which the whole rests. In the largest specimen the whole slope of masonry, measured that is from either the sea-wall of the wing or from the landward wall of the terrace to its farthest extent, is about 250 feet. Beyond this the ground is sometimes levelled for another 50 or 60 yards, forming a smooth sward which much enhanced the appearance of the ahu. In two cases the ahu is approached by a strip of narrow pavement formed of water-worn boulders laid flat, and bordered with the same kind of stone set on end; one of these

[1] This excludes some fifteen which may have carried statues, but about which doubt exists.

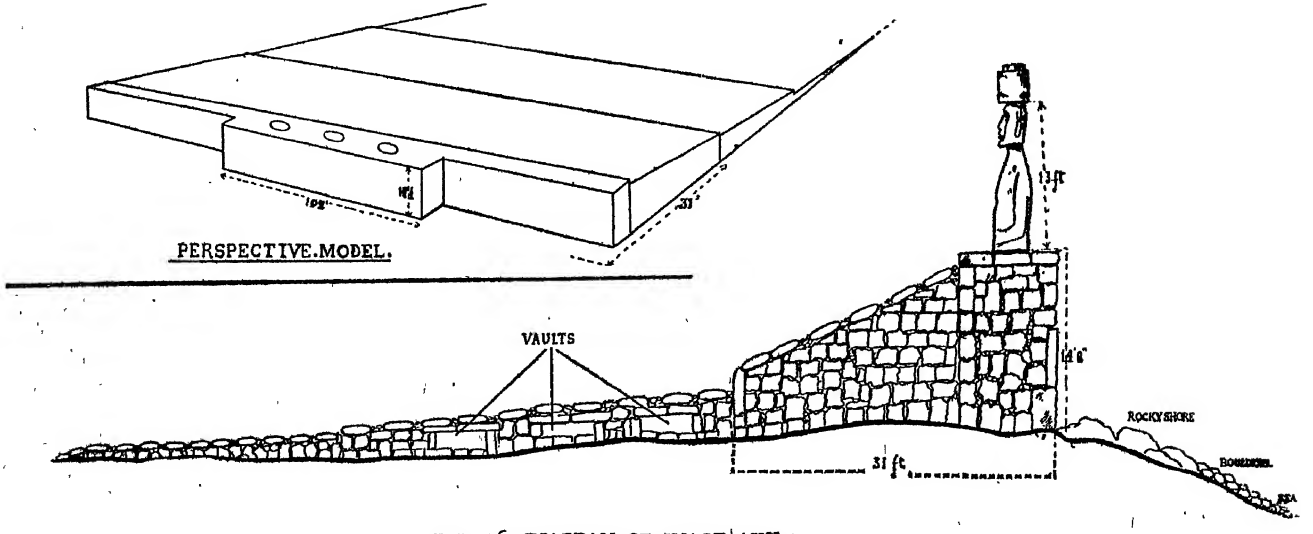


FIG. 36. DIAGRAM OF IMAGE AHU.

pavements is 220 feet in length by 12 feet in width, the other is somewhat smaller (fig. 93).

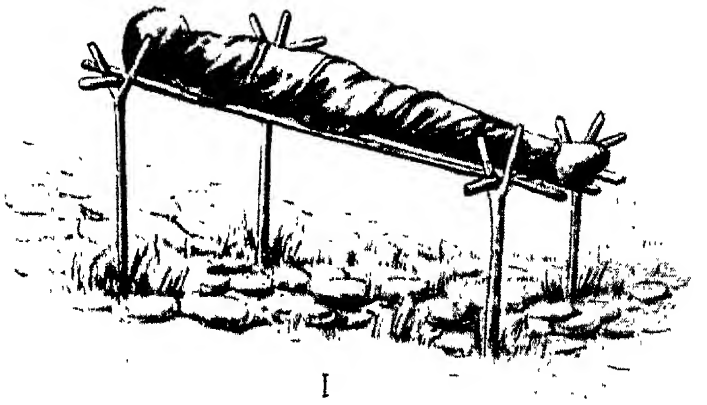
The general principle on which the sea or main walls are constructed is usually the same, though the various ahu differ greatly in appearance: first comes a row of foundation blocks on which have been set upright the largest stones that could be found; the upper part of the wall is composed of smaller stones, and it is finished with a coping. The variety in effect is due to the difference in material used. In some cases, as at Tongariki (fig. 33), the most convenient stone available has consisted of basalt which has cooled in fairly regular cubes, and the rows are there comparatively uniform in size; in other instances, as at Ahu Tepeu on the west coast (fig. 37), the handiest material has been sheets of lava, which have hardened as strata, and when these have been used the first tier of the wall is composed of huge slabs up to 9 feet in height. Irregularities in the shape and size of the big stones are rectified by fitting in small pieces and surmounting the shorter slabs with additional stones until the whole is brought to a uniform level; on the top of this now even tier horizontal blocks are laid, till the whole is the desired height (fig. 42). The amount of finish put into the work varies greatly: in many ahu the walls are all constructed of rough material; in others, while the slabs are untouched, the stones which bring them to the level and the cubes on the top are well wrought; in a very few instances, of which Vinapu (fig. 35) is the best example, the whole is composed of beautifully finished work. Occasionally, as at Oroi, natural outcrops of rock have been adapted to carry statues (fig. 122).

The study of the ahu is simplified by the fact that they were being used in living memory for the purpose for which they were doubtless originally built. They have been termed "burial-places," but burial in its usual sense was not the only, nor in most cases their principal, object. On death the corpse was wrapped in a tapa blanket and enclosed in its mattress of reeds; fish-hooks, chisels, and other objects were sometimes included. It was then bound into a bundle and carried on staves to the ahu, where it was exposed on an oblong framework. This consisted of four corner uprights set up in the ground, the upper extremities of which were Y-shaped, two transverse bars rested in the bifurcated ends, one at the head, the other at the foot, and

FIG. 37.

AHU TEPEU.

Part of seaward wall showing large slabs—some of the stones forming upper courses are wrought foundation-stones of canoe shaped houses, pp. 215–16.



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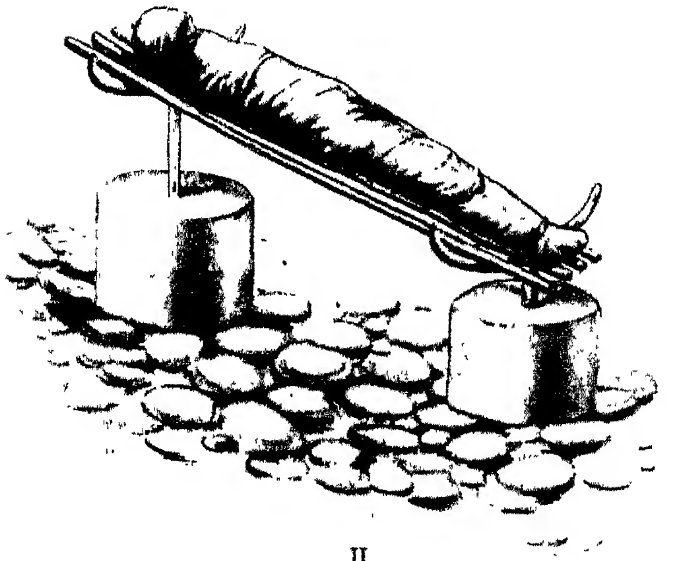


II

METHOD OF EXPOSING THE DEAD FROM ILLUSTRATED DESCRIPTIONS.

on these transverse bars were placed the extremities of the bundle which wrapped the corpse. The description and sketch are based on a model framework, and a wrapped-up figure, one of the wooden images of the island, prepared by the natives to amplify their verbal description.[1] At times, instead of the four supports, two stones were used with a hole in each, into which a Y-shaped stick was placed (fig. 38). While the corpse remained on the ahu the district was marked off by the péra, or taboo, for the dead; no fishing was allowed near, and fires and cooking were forbidden within certain marks—the smoke, at any rate, must be hidden or smothered with grass. Watch was kept by four relatives, and anyone breaking the regulations was liable to be brained. The mourning might last one, two, or even three years, by which time the whole thing had, of course, fallen to pieces. The bones were either left on the ahu, or collected and put into vaults of oblong shape, which were kept for the family, or they might be buried elsewhere. The end of the mourning was celebrated by a great feast, after which ceremony, as one recorder cheerfully concluded, "Pappa was finished."

Looked at from the landward side, we may, therefore, conceive an ahu as a vast theatre stage, of which the floor runs gradually upwards from the footlights. The back of the stage, which is thus the highest part, is occupied by a great terrace, on which are set up in line the giant images, each one well separated from his neighbour, and all facing the spectator. Irrespective of where he stands he will ever see them towering above him, clear cut out against a turquoise sky. In front of them are the remains of the departed. Unseen, on the farther side of the terrace, is the sea. The stone giants, and the faithful dead over whom they watch, are never without music, as countless waves launch their strength against the pebbled shore, showering on the figures a cloud of mist and spray.

Reconstruction and Transformation.—Those which have been described are ideal image ahu, but not one now remains in its original condition. It is by no means unusual to find, even in the oldest parts now existing, that is in walls erected to carry statues, pieces of still older images built into the stonework; in one case a whole statue has been used as a slab for the sea-wall,

[1] The body was no doubt supported by staves, though they were dispensed with in the model, being unnecessary for the wooden figure.

showing that alteration has taken place even when the cult was alive (fig. 42). Again, a considerable number of ahu, some thirteen in all, after being destroyed and terminating their career as image-terraces, have been rebuilt after the fashion of others constructed originally on a different plan (fig. 39). This is a type for which no name was found: it is in form that of a semi-pyramid, and there are between fifty and sixty on the island, in addition to those which have been in the first place image-ahu (fig. 42). A few are comparatively well made, but most are very rough. They resemble a pyramid cut in two, so that the section forms a triangle; this triangle is the sea-wall; the flanking buttress on the land side is made of stones, and is widest at the apex or highest point, gradually diminishing to the angles or extremities. The greatest height, in the centre, varies from about 5 feet to 12 feet, and a large specimen may extend in length from 100 feet to 160 feet. They contain vaults. In a few instances they are ornamented by broken pieces of image-stone, and occasionally by a row of small cairns along the top, which recall the position of the statues on the image-platform; for these no very certain reason was forthcoming, they were varyingly reported to be signs of "péra" or as marking the respective right of families on the ahu. As image-terraces may be found reconstructed as pyramid ahu, the latter form of building must have been carried on longer than the former, and probably till recent times, but there is nothing to show whether or not the earliest specimens of pyramid ahu are contemporary with the great works, or even earlier.

Overthrow of the Images and Destruction of the Ahu.—The only piece of a statue which still remains on its bed-plate is the fragment already alluded to at Tongariki (fig. 34). In the best-preserved specimens the figures lie on their faces like a row of huge nine-pins; some are intact, but many are broken, the cleavage having generally occurred when the falling image has come in contact with the containing wall at the lower level. The curious way in which the heads have not infrequently turned a somersault while falling and now lie face uppermost is shown in the eighth figure from the western end on Tongariki ahu (fig. 34).

No one now living remembers a statue standing on an ahu; and legend, though not of a very impressive character, has

FIG. 39.

A SEMI-PYRAMID AHU.

FIG. 40.

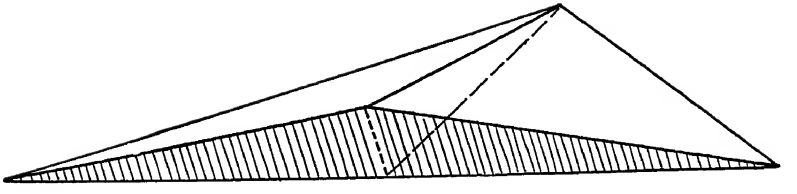


DIAGRAM OF SEMI-PYRAMID AHU.

AHU MAHATUA, SEAWARD SIDE.

Image ahu, with east wing clearly defined. Landward side and centre converted to semi-pyramid form.

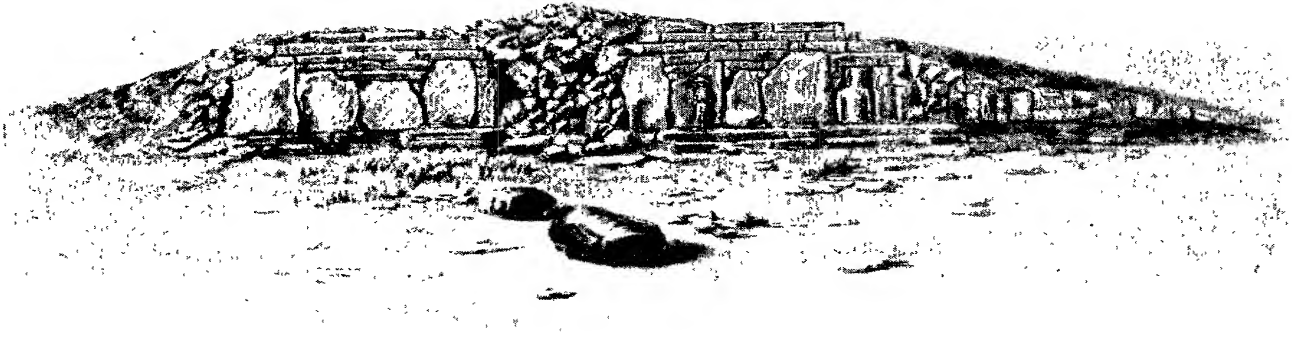
already arisen to account for the fall of some of them. An old man arrived, it is said, in the neighbourhood of Tongariki, and as he was unable to speak, he made known by means of signs that he wished for chicken-heads to eat; these were not forthcoming. He slept, however, in one of the houses there, and during the night his hosts were aroused by a great noise, which he gave it to be understood was made by his feet tapping against the stone foundations of the house. In the morning it was found that the statues on the great ahu had all fallen: it was the revenge of the old man. Such lore is, however, mixed up with more tangible statements to the effect that the figures were overthrown in tribal warfare by means of a rope, or by taking away the small stones from underneath the bed-plates, and thus causing them to fall forward. That the latter method had been used had been concluded independently by studying the remains themselves. It will be seen later, that other statues which have been set up in earth were deliberately dug out, and it seems unnecessary to look, as some have done, to an earthquake to account for their collapse.

Moreover, the conclusion that the images owed their fall to deliberate vandalism during internecine warfare is confirmed by knowledge, which still survives, connected with the destruction of the last one. This image stood alone on an ahu on the north coast, called Paro, and is the tallest known to have been put up on a terrace, being 32 feet in height. The events occurred just before living memory, and, like most stories in Easter Island, it is connected with cannibalism. A woman of the western clans was eaten by men of the eastern; her son managed to trap thirty of the enemy in a cave and consumed them in revenge; and during the ensuing struggle this image was thrown down (fig. 78). The oldest man living when we were on the island said that he was an infant at the time; and another, a few years younger, stated that his father as a boy helped his grandfather in the fight. It is not, after all, only in Easter Island that pleasure has been taken during war-time in destroying the architectural treasures of the enemy.

While, therefore, the date of the erection of the earliest image ahu is lost in the mists of antiquity, nor are we yet in a position to say when the building stopped, we can give approximately the time of the overthrow of the images. We know,

from the accounts of the early voyagers, that the statues, or the greater number of them, were still in place in the eighteenth century; by the early part of the middle of the nineteenth century not one was standing.

The destruction of the ahu has continued in more modern days. A manager, whose sheep had found the fresh-water springs below high water, thinking they were injuring themselves by drinking from the sea, erected a wall round a large part of the coast to keep them from it. For this wall the ahu came in of course most conveniently; it was run through a great number and their material used for its construction. One wing of Tongariki has been pulled down to form an enclosure for the livestock. In addition to the damage wrought by man, the ocean is ever encroaching: in some cases part of an ahu has already fallen into the sea, and more is preparing to follow; statues may be found lying on their backs in process of descending into the waves (fig. 43). One row of images, on the extreme western edge of the crater of Rano Kao, which were visible, although inaccessible, at the time of the visit of the U.S.A. ship *Mohican* in 1886, are now lying on the shore a thousand feet below. As the result of these various causes the burial-places of Easter Island are, as has been seen, all in ruins, and many are scarcely recognisable; only their huge stones and prostrate figures show what they must once have been.



AHU MAITAKI-TE-MOA, SEAWARD SIDE.

An image ahu partially destroyed and changed to semi-pyramid type. A statue from Raraku lies in foreground; another statue of different stone forms part of the main wall.

FIG. 43.

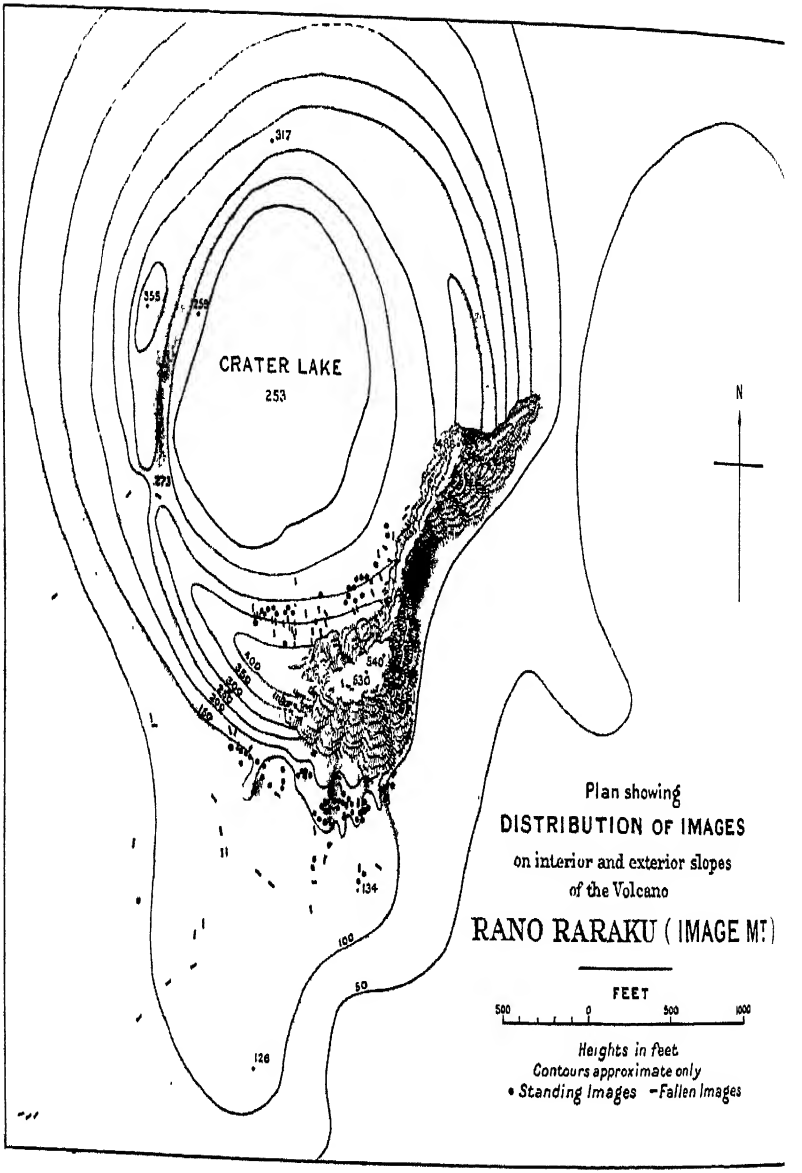
AHU RUNGA-VAE, ON SOUTH COAST, UNDERMINED BY THE SEA.

Statue has fallen backwards.

PREHISTORIC REMAINS

STATUES AND CROWNS

FIG 44.



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RANO RARAKU FROM THE SEA


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CHAPTER XIV

PREHISTORIC REMAINS (*continued*)

STATUES AND CROWNS

Rano Raraku, its Quarries and Standing Statues—the South-east Face of the Mountain—Isolated Statues—Roads—Stone Crowns of the Images.

STRANGE as it may appear, it is by no means easy to obtain a complete view of a statue on the island: most of the images which were formerly on the ahu lie on their faces, many are broken, and detail has largely been destroyed by weather. Happily, we are not dependent for our knowledge of the images on such information as we can gather from the ruins on the ahu, but are able to trace them to their origin, though even here excavation is necessary to see the entire figure. Rano Raraku is, as has already been explained, a volcanic cone containing a crater-lake. It resembles, to use an unromantic simile, one of the china drinking-vessels dedicated to the use of dogs, whose base is larger than their brim. Its sides are for the most part smooth and sloping, and several carriages could drive abreast on the northern rim of the crater, but towards the south-east it rises in height, and from this aspect it looks as if the circular mass had been sliced down with a giant knife forming it into a precipitous cliff. The cliff is lowest where the imaginary knife has come nearest to the central lake, thus causing the two ends to stand out as the peaks already mentioned (fig. 45).

The mountain is composed of compressed volcanic ash, which has been found in certain places to be particularly suitable for quarrying; it has been worked on the southern exterior slope, and also inside the crater both on the south and south-eastern sides. With perhaps a dozen exceptions, the

whole of the images in the island have been made from it, and they have been dragged from this point up hill and down dale to adorn the terraces round the coast-line of the island; even the images on the ahu, which have fallen into the sea on the further extremity of the western volcano, are said to have been of the same stone. It is conspicuous in being a reddish brown colour, of which the smallest chips can be easily recognised. It is composite in character, and embedded in the ash are numerous lapilli of metamorphic rock. Owing to the nature of this rock the earliest European visitors came to the conclusion that the material was factitious and that the statues were built of clay and stones; it was curious to find that the marooned prisoners of war of our own time fell into the same mistake of thinking that the figures were "made up."

The workable belt, generally speaking, forms a horizontal section about half-way up the side of the mountain. Below it, both on the exterior and within the crater, are banks of detritus, and on these statues have been set up; most of them are still in place, but they have been buried in greater or less degree by the descent of earth from above (fig. 57). Mr. Ritchie made a survey of the mountain with the adjacent coast, but it was found impossible to record the results of our work without some sort of plan or diagram which was large enough to show every individual image. This was accomplished by first studying each quarry, note-book in hand, and then, with the aid of field-glasses, amalgamating the results from below; the standing statues being inserted in their relation to the quarries above. It was a lengthy but enjoyable undertaking. Part of the diagram of the exterior has been redrawn with the help of photographs (fig. 60); the plan of the inside of the crater is shown in what is practically its original form (fig. 4[illegible]).

Quarries of Rano Raraku.—Leaving on one side for the moment the figures on the lower slope, let us in imagination scramble up the grassy side, a steep climb of some one or two hundred feet to where the rock has been hewn away into a series of chambers and ledges. Here images lie by the score in all stages of evolution, just as they were left when, for some unknown reason, the workmen laid down their tools for the last time and the busy scene was still. Here, as elsewhere, the wonder of the place can only be appreciated as the eye becomes trained to see. In the

majority of cases the statues still form part of the rock, and are frequently covered with lichen or overgrown with grass and ferns; and even in the illustrations, for which prominent figures have naturally been chosen, the reader may find that he has to look more than once in order to recognise the form. A con-

FIG. 48.

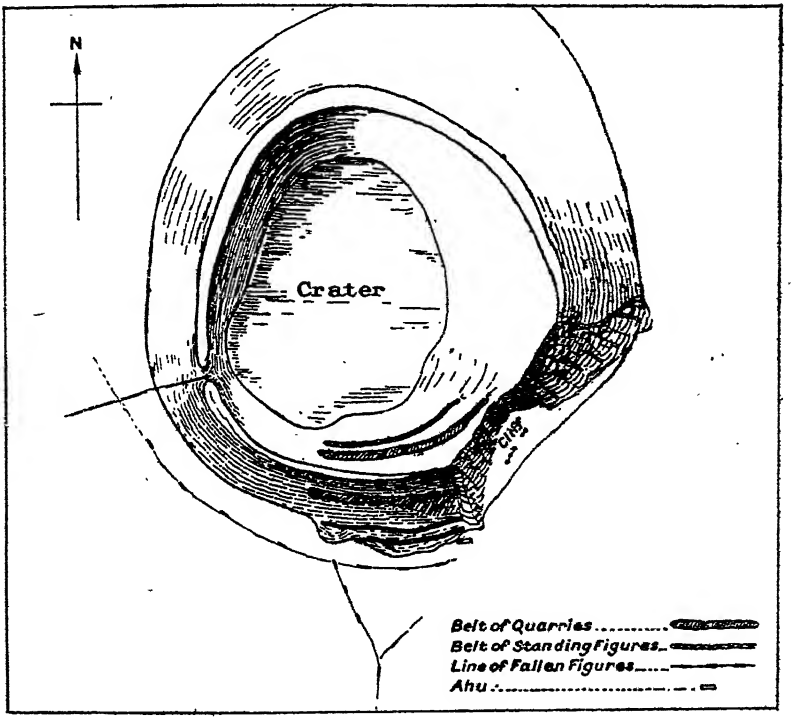


DIAGRAM OF RANO RARAKU.

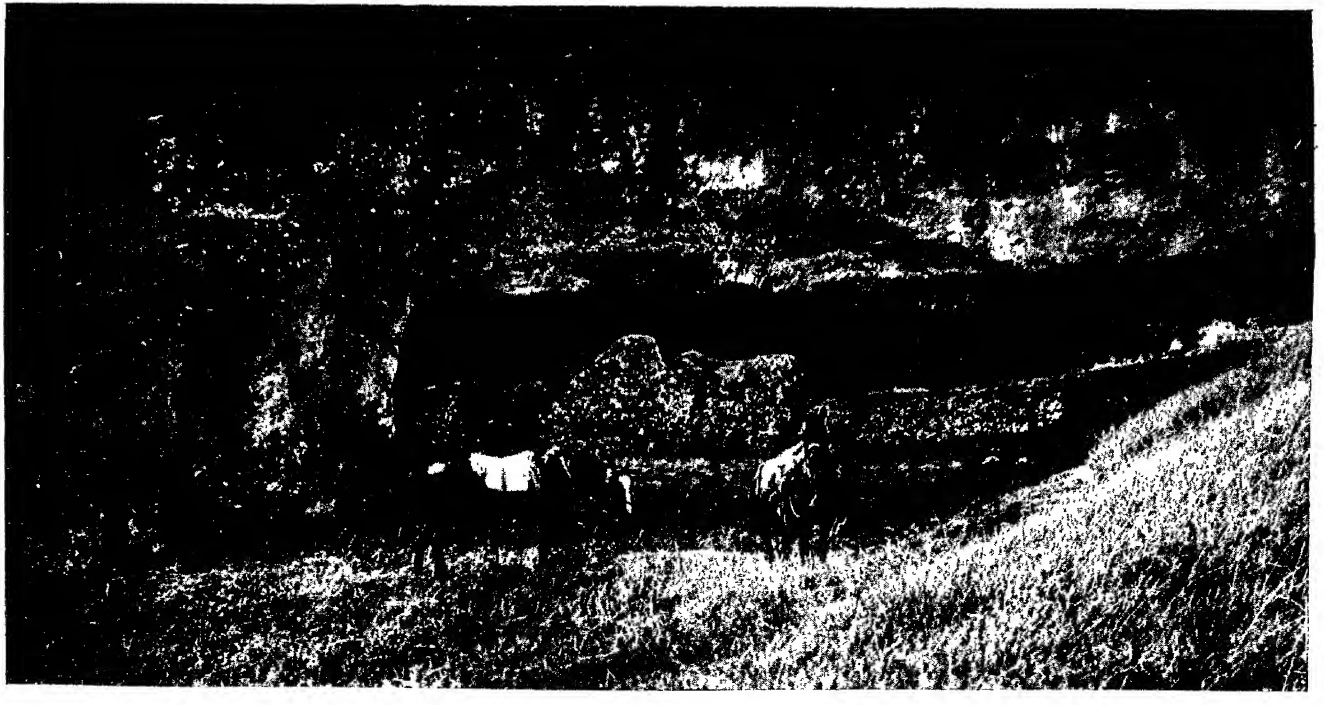
spicuous one first strikes the beholder: as he gazes, he finds with surprise that the walls on either hand are themselves being wrought into figures, and that, resting in a niche above him, is another giant; he looks down, and realises with a start that his foot is resting on a mighty face. To the end of our visit we occasionally found a figure which had escaped observation.

The workings on the exterior of Raraku first attract atten-

tion; here their size, and incidentally that of many of the statues, has largely been determined by fissures in the hillside, which run vertically and at distances of perhaps 40 feet. The quarries have been worked differently, and each has a character of its own. In some of them the principal figures lie in steps, with their length parallel to the hill's horizontal axis; one of this type is reached through a narrow opening in the rock, and recalls the side-chapel of some old cathedral, save that nature's blue sky forms the only roof (no. 74, fig. 60); immediately opposite the doorway there lies, on a base of rock, in quiet majesty, a great recumbent figure. So like is it to some ancient effigy that the awed spectator involuntarily catches his breath, as if suddenly brought face to face with a tomb of the mighty dead. Once, on a visit to this spot, a rather quaint little touch of nature supervened: going there early in the morning, with the sunlight still sparkling on the floor of dewy grass, a wild-cat, startled by our approach, rushed away from the rock above, and the natives, clambering up, found nestling beneath a statue at a high level a little family of blind kittens.

In other instances the images have been carved lying, not horizontally, but vertically, with sometimes the head, and sometimes the base, toward the summit of the hill. But no exact system has been followed, the figures are found in all places, and all positions. When there was a suitable piece of rock it has been carved into a statue, without any special regard to surroundings or direction. Interspersed with embryo and completed images are empty niches from which others have already been removed; and finished statues must, in some cases, have been passed out over the top of those still in course of construction. From all the outside quarries is seen the same wonderful panorama: immediately beneath are the statues which stand on the lower slopes; farther still lie the prostrate ones beside the approach; while beyond is the whole stretch of the southern plain, with its white line of breaking surf ending in the western mountain of Rano Kao (fig. 54).

The quarries within the crater are on the same lines as those without, save that those on the south-eastern side form a more continuous whole. Here the most striking position is on the top of the seaward cliff, in the centre of which is a large finished image (no. 16, fig. 47); on one side the ground falls away more or



STATUE IN QUARRY, PARTIALLY SCULPTURED

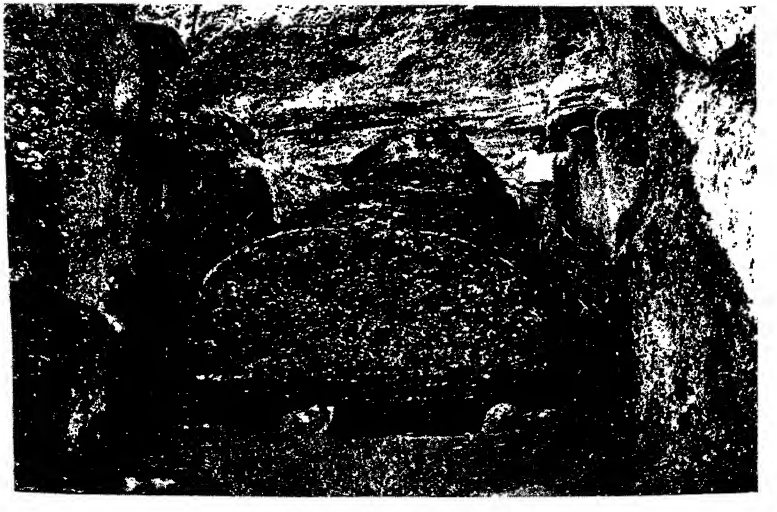
[No. 41. Fig 60.]

FIG. 50.

STATUE IN QUARRY

Attached to rock by " keel " only. Top of head (flat surface) towards spectator.
[No. 61. Fig. 60.]

FIG. 51.



STATUE IN QUARRY

Ready to be launched ; movement prevented by stone wedges. Base towards spectator.
[No. 57. Fig. 60.]

less steeply to the crater-lake, on the other a stone thrown down would reach the foot of the precipice; the view extends from sea to sea. Over all the most absolute stillness reigns.

The statues in the quarries number altogether over 150. Amongst this mass of material there is no difficulty in tracing the course of the work. The surface of the rock, which will form the figure, has generally been laid bare before work upon it began, but occasionally the image was wrought lying partially under a canopy (fig. 49). In a few cases the stone has been roughed out into preliminary blocks (no. 58, fig. 60), but this procedure is not universal, and seems to have been followed only where there was some doubt as to the quality of the material. When this was not the case the face and anterior aspect of the statue were first carved, and the block gradually became isolated as the material was removed in forming the head, base, and sides. A gutter or alley-way was thus made round the image (fig. 55), in which the niches where each man has stood or squatted to his work can be clearly seen; it is, therefore, possible to count how many were at work at each side of a figure.

When the front and sides were completed down to every detail of the hands, the undercutting commenced. The rock beneath was chipped away by degrees till the statue rested only on a narrow strip of stone running along the spine; those which have been left at this stage resemble precisely a boat on its keel, the back being curved in the same way as a ship's bottom (fig. 50). In the next stage shown the figure is completely detached from the rock, and chocked up by stones, looking as if an inadvertent touch would send it sliding down the hill into the plain below (fig. 56). In one instance the moving has evidently begun, the image having been shifted out of the straight. In another very interesting case the work has been abandoned when the statue was in the middle of its descent; it has been carved in a horizontal position in the highest part of the quarry, where its empty niche is visible, it has then been slewed round and was being launched, base forward, across some other empty niches at a lower level. The bottom now rests on the floor of the quarry, and the figure, which has broken in half, is supported in a standing fashion against the outer edge of the vacated shelves. The first impression was that it had met with an accident in transit, and

been abandoned; but it is at least equally possible that for the purpose of bringing it down, a bank or causeway of earth had been built up to level the inequalities of the descent, and that it was resting on this when the work came to an end; the soil would then in time be washed away, and the figure fracture through loss of support.

In the quarry which is shown in fig. 54, the finished head can be seen lying across the opening, the body is missing, presumably broken off and buried; the bottom of the keel on which the figure at one time rested can be clearly traced in a projecting line of rock down the middle of its old bed, also the different

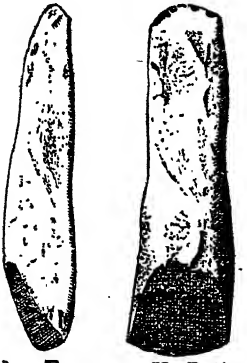


FIG. 52. STONE TOOLS (*Toki*). FIG. 53. *H. Balfour del.*

sections where the various men employed have chipped away the stone in undermining the statue. In the quarry wall the niches occupied by the sculptors are also visible, at more than one level, the higher ones being discarded when the upper portion of the work was finished and a lower station needed. The hand of the standing boy in fig. 51 rests on a small platform similarly abandoned.

The tools were found with which the work has been done. One type of these can be seen lying about in great abundance (fig. 52). They are of the same material as the lapilli in the statues, and made by flaking. Some specimens are pointed at both ends,

HEAD OF A STATUE AT MOUTH OF QUARRY FROM WHICH IT HAS BEEN HEWN.

[No. 72. Fig. 60.]

FIG. 55.

UPPER PORTION OF LARGEST IMAGE IN QUARRY,
WITH ALLEY-WAY FOR WORKMEN.

[No. 64. Fig. 50.]

others have one end more or less rounded. It is unlikely that they were hafted, and they were probably held in the hand when in use. They were apparently discarded as soon as the point became damaged. There is another tool much more carefully made, an adze blade, with the lower end bevelled off to form the cutting edge. In the specimen shown, the top is much abraded apparently from hammering with a maul or mallet (fig. 53). These are rarely found, the probability being that they were too precious to leave and were taken home by the workmen. The whole process was not necessarily very lengthy; a calculation of the number of men who could work at the stone at the same time, and the amount each could accomplish, gave the rather surprising result that a statue might be roughed out within the space of fifteen days. The most notable part of the work was the skill which kept the figure so perfect in design and balance that it was subsequently able to maintain its equilibrium in a standing position; to this it is difficult to pay too high a tribute.

It remains to account for the vast number of images to be found in the quarry. A certain number have, no doubt, been abandoned prior to the general cessation of the work; in some cases a flaw has been found in the rock and the original plan has had to be given up—in this case, part of the stone is sometimes used for either a smaller image or one cut at a different angle. In other instances the sculptors have been unlucky enough to come across at important points one or more of the hard nodules with which their tools could not deal, and as the work could not go down to posterity with a large wart on its nose or excrescence on its chin, it has had to be stopped. But when all these instances have been subtracted, the amount of figures remaining in the quarries is still startlingly large when compared with the number which have been taken out of it, and must have necessitated, if they were all in hand at once, a number of workers out of all proportion to any population which the island has ever been likely to have maintained. The theory naturally suggests itself that some were merely rock-carvings and not intended to be removed. It is one which needs to be adopted with caution, for more than once, where every appearance has pointed to its being correct, a similar neighbour has been found which was actually being removed; on the whole, however, there can be

little doubt that it is at any rate a partial solution of the problem. Some of the images are little more than embossed carvings on the face of the rock without surrounding alley-ways. In one instance, inside the crater, a piece of rock which has been left standing on the very summit of the cliff has been utilised in such a way that the figure lies on its side, while its back is formed by the outward precipice (fig. 56); this is contrary to all usual methods, and it seems improbable that it was intended to make it into a standing statue. Perhaps the strongest evidence is afforded by the size of some of the statues: the largest (fig. 55; no. 64, fig. 60) is 66 feet in length, whereas 36 feet is the extreme ever found outside the quarry; tradition, it is true, points out the ahu on the south coast for which this monster was designed, but it is difficult to believe it was ever intended to move such a mass. If this theory is correct, it would be interesting to know whether the stage of carving came first, and that of removal followed, as the workmen became more expert; or whether it was the result of decadence when labour may have become scarce. It is, of course, possible that the two methods proceeded concurrently, rock-carvings being within the means of those who could not procure the labour necessary to move the statue.

Legendary lore throws no light on these matters, nor on the reasons which led to the desertion of this labyrinth of work; it has invented a story which entirely satisfies the native mind and is repeated on every occasion. There was a certain old woman who lived at the southern corner of the mountain and filled the position of cook to the image-makers. She was the most important person of the establishment, and moved the images by supernatural power (*mana*), ordering them about at her will. One day, when she was away, the workers obtained a fine lobster, which had been caught on the west coast, and ate it up, leaving none for her; unfortunately they forgot to conceal the remains, and when the cook returned and found how she had been treated, she arose in her wrath, told all the images to fall down, and thus brought the work to a standstill.

Standing Statues of Rano Raraku.—Descending from the quarries, we turn to the figures below. A few at the foot of the mountain have obviously been thrown down; one of these (no. 6, fig. 60) was wrecked in the same conflict as the one on Ahu Paro,

FIG. 56.

STATUE CARVED ON EDGE OF PRECIPICE.

INTERIOR OF CRATER.

[No. 27. Fig. 47.]

No. 32. No. 33. No. 34.

STANDING STATUES ON EXTERIOR OF RANO RARAKU SHOWING PARTIAL BURIAL

and one is shown where an attempt has been made to cut off the head. Another series of images have originally stood round the base on level ground (nos. 1, 2, 3, fig. 60), extending from the exterior of the entrance to the crater to the southern corner; these are all prostrate. On the slopes there are a few horizontal statues, but the great majority, both inside the crater and without, are still erect. Outside, some forty figures stand in an irregular belt, reaching from the corner nearest the sea to about half-way to the gap leading into the crater. The bottom of the mountain is here diversified by little hillocks and depressions; these hillocks would have made commanding situations, but rather curiously the statues, while erected quite close to them, and even on their sides, are never on the top. Inside the crater, where some twenty statues are still erect, the arrangement is rather more regular; but, on the whole, they are put up in no apparent order. All stood with their backs to the mountain.

They vary very considerably in size; the tallest which could be measured from its base was 32 feet 3 inches, while others are not much above 11 feet. Every statue is buried in greater or less degree, but while some are exposed as far as the elbow, in others only a portion of the top of the head can be seen above the surface (fig. 57), others no doubt are covered entirely. The number visible must vary from time to time, as by the movement of the earth some are buried and others disclosed. An old man, whose testimony was generally reliable, stated, when speaking of the figures on the outside of the mountain, that while those nearer the sea were in the same condition as he always remembered them, those farther from it were now more deeply buried than in his youth.

Various old people were brought out from the village at Hanga Roa to pay visits to the camp, but the information forthcoming was never of great extent; one elderly gentleman in particular took much more interest in roaming round the mountain, recalling various scenes of his youth, than in anything connected with the statues. A few names are still remembered in connection with the individual figures, and are said to be those of the makers of the images, and some proof is afforded of the reality of the tradition by the fact that the clans of the persons named are consistently given. Another class of names is, however, obviously derived merely from local circumstances;

one in the quarry, under a drip from above, is known by the equivalent for "Dropping Water," while a series inside the crater are called after the birds which frequent the cliff-side, "Kia-kia, Flying," "Kia-kia, Sitting," and so forth. A solitary legend relates to an unique figure, resembling rather a block than an image, which lies on the surface on the outside of the mountain (no. 24, fig. 60). It is the single exception to the rule mentioned above, that no evolution can be traced in the statues on the island. The usual conception is there, and the hands are shown, but the head seems to melt into the body and the ear and arm to have become confused. It is said to have been the first image made and is known as Tai-haré-atua, which tradition says was the name of the maker. He found himself unable to fashion it properly, and went over to the other side of the island to consult with a man who lived near Hanga Roa, named Rauwai-ika. He stayed the night there, but the expert remained silent, and he was retiring disappointed in the morning, when he was followed by his host, who called him back. "Make your image," said he, "like me,"—that is, in form of a man.

On our first visit to the mountain, overcome by the wonder of the scene, we turned to our Fernandez boy and asked him what he thought of the statues. Like the classical curate, when the bishop inquired as to the character of his egg, he struggled manfully between the desire to please and a sense of truth; like the curate, he took refuge in compromise. "Some of them," he said doubtfully, he thought "were very nice." If the figures at first strike even the cultured observer as crude and archaic, it must be remembered that not only are they the work of stone tools, but to be rightly seen should not be scrutinised near at hand. "Hoa-haka-nanaia," for instance, is wholly and dismally out of place under a smoky portico, but on the slopes of a mountain, gazing in impenetrable calm over sea and land, the simplicity of outline is soon found to be marvellously impressive. The longer the acquaintance the more this feeling strengthens; there is always the sense of quiet dignity, of suggestion and of mystery.

While the scene on Raraku always arouses a species of awe, it is particularly inspiring at sunset, when, as the light fades, the images gradually become outlined as stupendous black figures against the gorgeous colouring of the west. The most

FIG. 58.

STATUES ON RANO-RARAKU, SHOWING DISTENSION OF EAR.

LOBE REPRESENTED AS A ROPE.

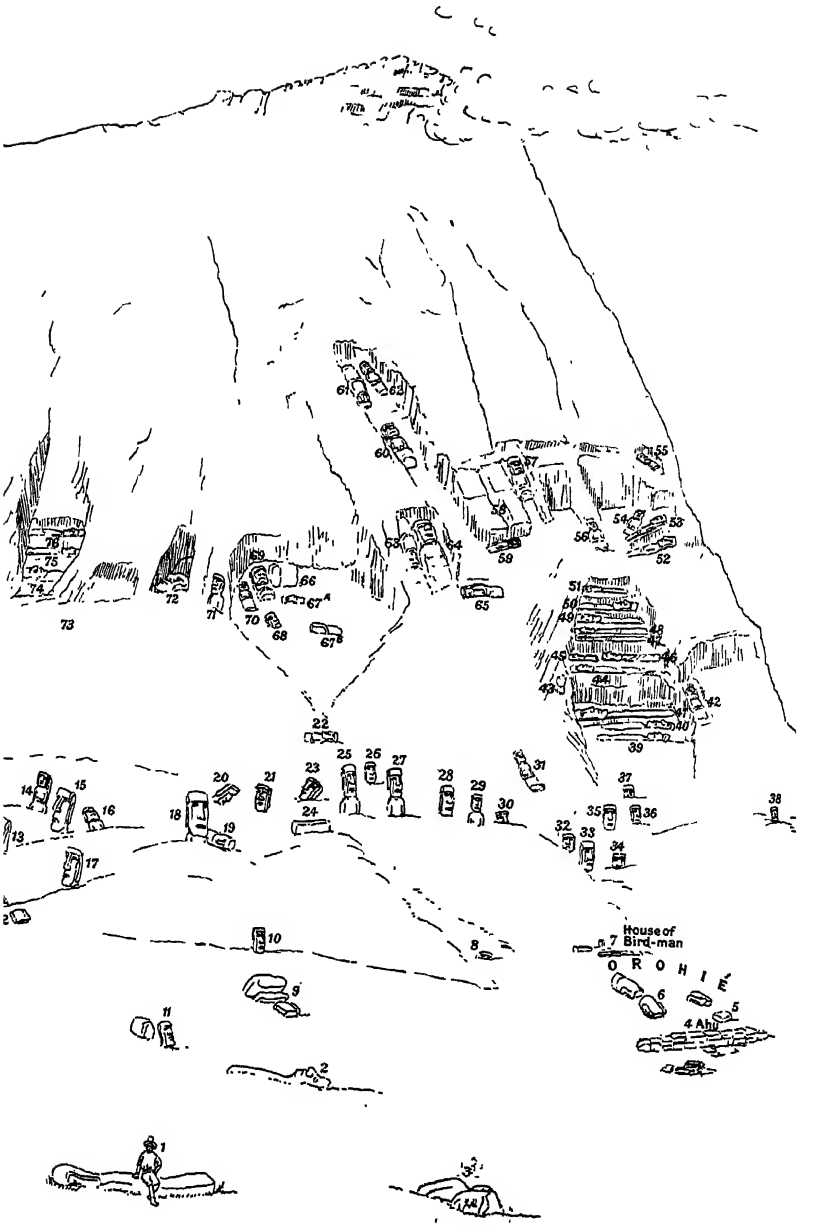
[Nos. 27 and 29. Fig. 60.]

FIG. 59.

LOBE CONTAINING A DISC.

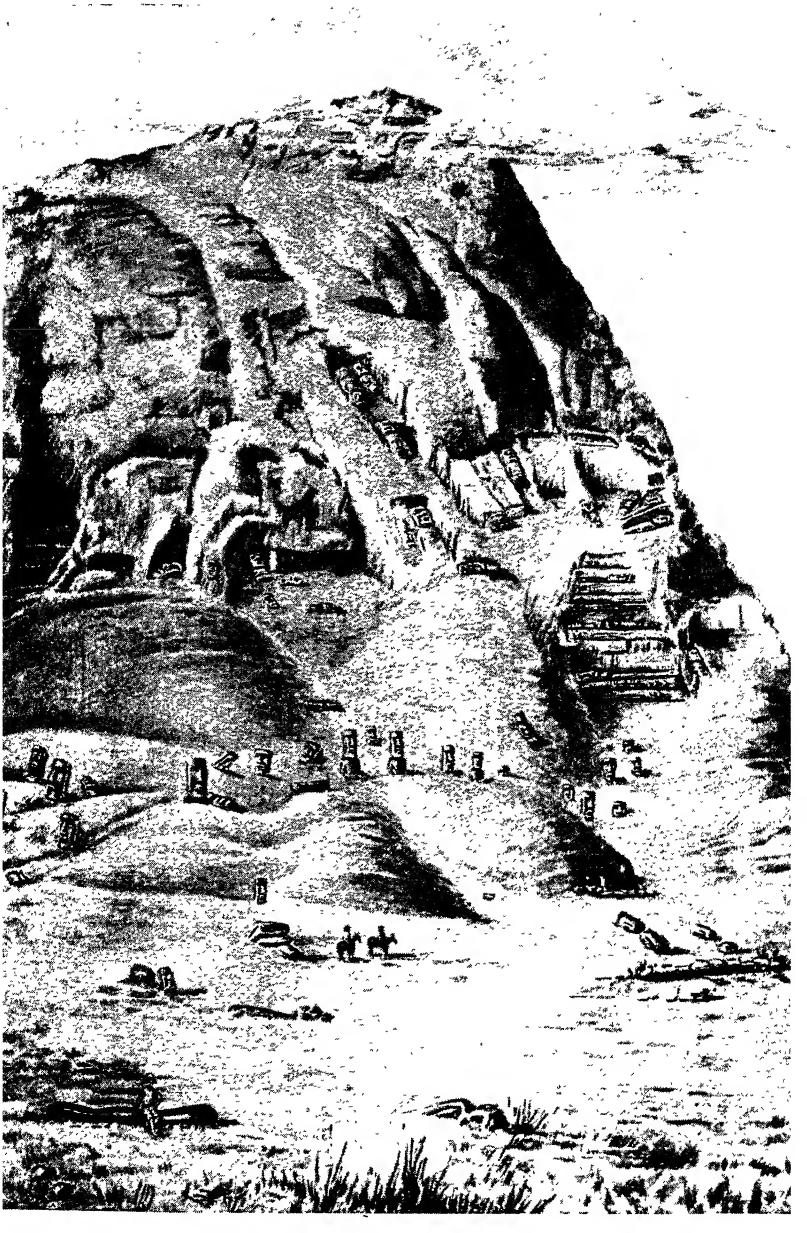
[No. 23. Fig. 60.]

FIG. 60A.



KEY TO DIAGRAMMATIC SKETCH.

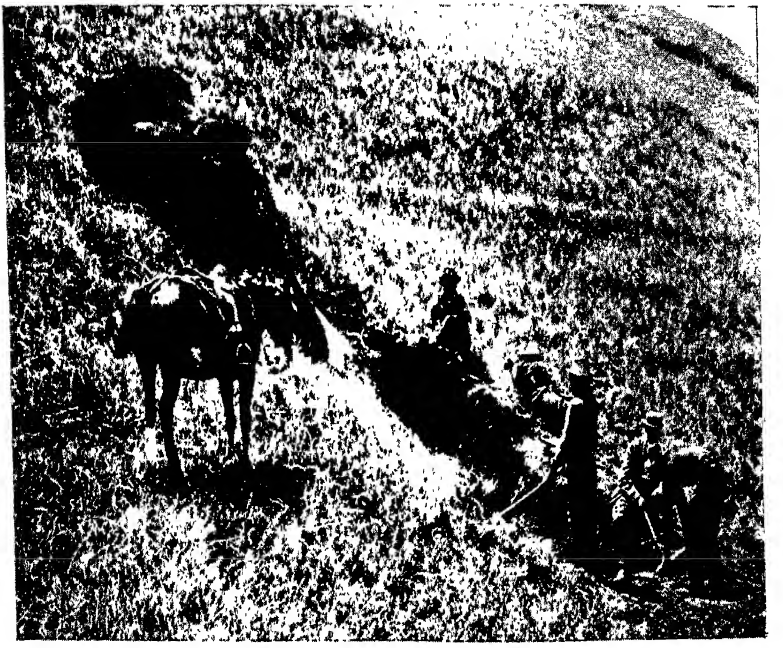
[4A]



EXTERIOR OF RANO RARAKU. EASTERN PORTION OF SOUTHERN ASPECT.

Diagrammatic sketch showing position of statues.

FIG. 61.



DIGGING OUT A STATUE.

For same image after excavation see fig. 69.

striking sight witnessed on the island was a fire on the hill-side; in order to see our work more clearly we set alight the long dry grass, always a virtuous act on Easter Island that the live-stock may have the benefit of fresh shoots; in a moment the whole was a blaze, the mountain, wreathed in masses of driving smoke, grew to portentous size, the quarries loomed down from above as dark giant masses, and in the whirl of flame below the great statues stood out calmly, with a quiet smile, like stoical souls in Hades.

The questions which arise are obvious: do these buried statues differ in any way from those in the workings above, from those on the ahu or from one another? were they put up on any foundation? and, above all, what is the history of the mountain and the *raison d'être* of the figures? In the hope of throwing some light on these problems we started to dig them out. It had originally been thought that the excavation of one or two would give all the information which it was possible to obtain, but each case was found to have unique and instructive features, and we finally unearthed in this way, wholly or in part, some twenty or thirty statues. It was usually easy to trace the stages by which the figures had been gradually covered. On the top was a layer of surface soil, from 3 to 8 inches in depth; then came debris, which had descended from the quarry above in the form of rubble, it contained large numbers of chisels, some forty of which have been found in digging out one statue; below this was the substance in which a hole had been dug to erect the image, it sometimes consisted of clay and occasionally in part of rock. Not unfrequently the successive descents of earth could be traced by the thin lines of charcoal which marked the old surfaces, obviously the result of grass or brushwood fires. The few statues which are in a horizontal position are always on the surface (no. 31, fig. 60), and at first give the impression that they have been abandoned in the course of being brought down from the quarries; as they are frequently found close to standing images, of which only the head is visible, it follows that, if this is the correct solution, the work must still have been proceeding when the earlier statues were already largely submerged. The juxtaposition, however, occurs so often that it seems, on the whole, more probable that the rush of earth which covered some, upset the foundations of others, and either threw them

down where they stood or carried them with it on top of the flood. These various landslips allow of no approximate deductions as to the date, in the manner which is possible with successively deposited layers of earth.

To get absolutely below the base of an image was not altogether easy. The first we attempted to dig out was one of the farther ones within the crater (no. 19, fig. 47); it was found that, while the back of the hole into which it had been dropped was excavated in the soft volcanic ash, the front and remaining sides were of hard rock. This rock was cut to the curvature of the figure at a distance of some 3 inches from it, and as the chisel marks were horizontal, from right to left, the workmen must have stood in the cup while preparing it: in clearing out the alluvium between the wall of the cup and the figure, six stone implements were found. The hands, which were about 1 foot below the level of the rim, were perfectly formed. The next statue chosen for excavation was also inside the crater (no. 107, fig. 47); it was most easily attacked from the side, and this time it was possible to get low enough to see that it stood on no foundation, and that the base instead of expanding, as with those which stood on the ahu, contracted in such a manner as to give a peg-shaped appearance; this confirmed the impression made by the previous excavation, that the image was intended to remain in its hole and was not, as some have stated, merely awaiting removal to an ahu (fig. 62).

The story was shown not only in the sections of the excavation, but in the degrees of weathering on the figure itself: the lowest part of the image to above the elbow exhibited, by the sharpness of its outlines and frequently of the chisel cuts also, that it had never been exposed, the other portions being worn in relative degrees. Traces of the smoothness of the original surface can still be seen above-ground in the more protected portions of some of the statues, such as in the orbit and under the chin (see frontispiece); but a much clearer impression is of course gained of the finish and detail of the image when the unweathered surface is exposed. The polish is often very beautiful, and pieces of pumice, called "punga," are found, with which the figures are said to have been rubbed down. The fingers taper, and the excessive length of the thumb-joint and nail are remarkable (fig. 72). The nipples are in some cases so pronounced that the natives

Showing effect of weathering and peg-shaped base.
[No. 107. Fig. 47.]

Showing scamped work in lower part of figure, no right hand carved, and surface only coarsely chiselled.
[No. 36. Fig. 47.]

FIG. 64.

DESIGNS ON BACKS OF IMAGES.

BACK OF AN EXCAVATED STATUE.

Showing (*a*) typical raised rings and girdle; (*b*) exceptional incised carvings.

[No. 109. Fig. 47.]

FIG. 65.

P. Edmunds.

STATUE ON AN AHU AT ANAKENA.
Rings on centre and lower portion of back.

often characterised them as feminine, but in no case which we came across did the statues represent other than the nude male figure[1]; the navel is indicated by a raised disc. On the statue with the contracting base, which is one of the best, the surface modelling of the elbow-joint is clearly shown. The orbital cavity in the figures on Raraku is rather differently modelled from those on the ahu; in the statues on the mountain the position of the eyeball is always indicated by a straight line below the brow, the orbit has no lower border (fig. 72). On the terraces the socket is constantly hollowed out as in the figure at the British Museum (fig. 31).

The eye is the only point in which the two sets vary, with the important exception that some on the mountain have a type of back which never appears on the ahu. This question of back proved to be of special interest: in some images it remained exactly as when the figure left the quarry, the whole was convex, giving it a thick and archaic appearance, particularly as regards the neck; in other instances, the posterior was beautifully modelled after the same fashion as those on the terraces, the stone had been carefully chipped away till the ears stood out from the back of the head, the neck assumed definite form, and the spine, instead of standing out as a sharp ridge, was represented by an incised line. This second type, when excavated, proved, to our surprise, to possess a well-carved design in the form of a girdle shown by three raised bands, this was surmounted by one or sometimes by two rings, and immediately beneath it was another design somewhat in the shape of an M (figs. 64 and 106). The whole was new, not only to us, but to the natives, who greatly admired it. Later, when we knew what to look for, traces of the girdle could be seen also on the figures on the ahu where the arm had protected it from the weather. It was afterwards realised with amusement that the discovery of this design might have been made before leaving England by merely passing the barrier and walking behind the statues in the Bloomsbury portico. One case was found, a statue at Anakena, where a ring was visible, not only on the back but also on each of the buttocks, and in view of subsequent information these lower rings became of special importance. The girdle in this case consisted of one line only; the detail of the

[1] The sole possible exception was probably due to some flaw in the stone.

carving had doubtless been preserved by being buried in the sand (fig. 65). The two forms of back, unmodelled and modelled, stand side by side on the mountain (figs. 66, 67).

The next step was to discover where and when the modelling was done. Certainly not in the original place in the quarry, where it would be impossible from the position in which the image was evolved; generally speaking there was no trace of such work, and it was not until many months later that new light was thrown on the matter. Then it was remarked that in one of the standing statues on the outside of the hill, which was buried up to the neck (fig. 59), while the right ear was most carefully modelled, showing a disc, the left ear was as yet quite plain, and that the back of the head also was not symmetrical. Excavations made clear that the whole back was in course of transformation from the boat-shaped to the modelled type, each workman apparently chipping away where it seemed to him good (fig. 68). Two or three similar cases were then found on which work was proceeding; but on the other hand, some of the simpler backs were excavated to the foot, and others a considerable distance, and there was no indication that any alteration was intended. There are three possible explanations for these erect and partially moulded statues: Firstly, it may have been the regular method for the back to be completed after the statue was set up, in which case some kind of staging must have been used; one of our guides had made a remark, noted, but not taken very seriously at the moment, that " the statues were set up to be finished "; some knowledge or tradition of such work, therefore, appeared to linger. Secondly, the convex back may be the older form, and those on which work was being done were being modelled to bring them up to date. Alteration did at times take place; a certain small image presented a very curious appearance both from the proportion of the body, which was singularly narrow from back to front, and because it was difficult to see how it remained in place as it was apparently exposed to the base; it turned out that the figure had been carved out of the head of an older statue, of which the body was buried below (no. 14, fig. 60). Thirdly, these particular figures may have been erected and left in an unfinished condition; if so, their deficiencies were high up and would be obvious.

Scamping did not often occur, and when it did so it was in

FIG. 66.

FIG. 67.

BACKS OF STANDING STATUES, RANO RARAKU.

Unmodelled. Modelled.

Showing back in process of being modelled.
[No. 23. Fig, 50.]

Showing image wedged by boulders.

EXCAVATED STATUES.

the concealed portions. In one case the left hand was correctly modelled, but the right was not even indicated beyond the wrist (fig. 63). The statue shown in the frontispiece, which rejoices in the name of Piro-piro, meaning "bad odour,"[1] stands at the foot of the slope, and appears to remain as it was set up without further burial. It is a well-made figure, probably one of the most recent, and the upper part of the back is carefully moulded, but on digging it out it was found that the bottom had not been finished, but left in the form of a rough excrescence of stone; there was no ring, but a girdle had been carved on the protruding portion, so that this was not intended to be removed. In another instance a large head had fallen on a slope at such an angle that it was impossible to locate the position of the body; curiosity led to investigation, when it was found that the thing was a fraud, the magnificent head being attached to a little dwarf trunk, which must have been buried originally nearly to the neck to keep the top upright. These instances of "jerry-building" confirm our impression that at any rate a large number of the statues were intended to remain *in situ*.

Indications were found of two different methods of erection, and the mode may have been determined by the nature of the ground. By the first procedure the statue seems to have been placed on its face in the desired spot, and a hole to have been dug beneath the base. The other method was to undermine the base, with the statue lying face uppermost; in several instances a number of large stones were found behind the back of the figure, evidently having been used to wedge it while it was dragged to the vertical. The upright position had sometimes been only partially attained; one statue was still in a slanting attitude, corresponding exactly to the slope of a hard clay wall behind it; the interval between the two, varying from three yards to eighteen inches, had been packed with sub-angular boulders which weighed about one hundredweight, or as much as a man could lift (fig. 69).

A few of the figures bear incised markings rudely, and apparently promiscuously, carved. This was first noted in the case of one of two statues which stand together nearest to the entrance of the crater; here it has been found possible to work the rock at a low level, and in the empty quarry, from which they no

[1] The farthest outstanding figure to the left in fig. 46.

doubt have been taken, two images have been set up, one slightly in front of the other; six still unfinished figures lie in close proximity (figs. 70 and 71). The standing figure, nearest to the lake, bore a rough design on the face, and when it was dug out the back was found to be covered with similar incised marks. The natives were much excited, and convinced that we should receive a large sum of money in England when the photograph of these was produced, for nothing ever dispelled the illusion that the expedition was a financial speculation. It was these carvings more especially that we ourselves hastily endeavoured to cover up when, on the arrival of Admiral von Spee's Squadron, we daily expected a visit from the officers on board. The markings have certainly not been made by the same practised hand as the raised girdle and rings, and appear to be comparatively recent (fig. 64). Other statues were excavated, where similar marks were noticed, but, except in this case, digging led practically always to disappointment. It was the part above the surface only which had been used as a block on which to scrawl design, from the same impulse presumably as impels the school-boy of to-day to make marks with chalk on a hoarding. On one ahu the top of the head of a statue has been decorated with rough faces, the carving evidently having been done after the statue had fallen.

In digging out the image with the tattooed back, we came across the one and only burial which was found in connection with these figures; it was close to it and at the level of the rings. The long bones, the patella, and base of the skull were identified; they lay in wet soil, crushed and intermixed with large stones, so the attitude could not be determined beyond the fact that the head was to the right of the image and the long bones to the left. These bones had become of the consistency of moist clay, and could only be identified by making transverse sections of them with a knife, after first cleaning portions longitudinally by careful scraping.

In several other instances human bones were discovered near the statues, but, like the carvings, they appeared to be of later date than the images. One skull was found beneath a figure which was lying face downwards on the surface; another fragment must have been placed behind the base after the statue had fallen forward. The natives stated that in the epidemics which

TWO IMAGES ERECTED IN QUARRY. FRONT VIEW.
Prior to excavation.
[Nos. 108–109. Fig. 47.]

TWO IMAGES ERECTED IN QUARRY. BACK VIEW.
After excavation.

[Nos. 109–108. Fig. 47. See also Fig. 64.]

ravaged the island the statues afforded a natural mark for depositing remains. In the same way a head near an ahu, which was at first thought to be that of a standing statue, turned out to be broken from the trunk and put up pathetically to mark the grave of a little child. There is a roughly constructed ahu on the outside of Rano Raraku at the corner nearest to the sea, of which more will be said hereafter, and a quarried block of rock on the very top of the westerly peak was also said to be used for the exposure of the dead (no. 75, fig. 47). Close to this block there are some very curious circular pits cut in the rock; one examined was 5 feet 6 inches in depth and 3 feet 6 inches in diameter (no. 74, fig. 47). It is possible they were used as vaults, but, if so, the shape is quite different from those of the ahu. The conclusion arrived at was that the statues themselves were not directly connected with burials. There seems also no reason to believe that they are put up in any order or method; they appear to have been erected on any spot handy to the quarries where there was sufficient earth, or even, as has been seen, in the quarry itself when circumstances permitted.

The South-Eastern Side of Rano Raraku is a problem in itself. The great wall formed by the cliff is like the ramparts of some giant castle rent by vertical fissures. The greatest height, the top of the peak, is about five hundred feet, of which the cliff forms perhaps half, the lower part being a steep but comparatively smooth bank of detritus. Over the grassy surface of this bank are scattered numerous fragments of rock, weighing from a few pounds to many tons, which have fallen down from above. The kitchen tent in our camp at the foot had a narrow escape from being demolished by one of these stones, which nearly carried it away in the impetus of its descent. It has never been suggested that this face of the mountain was being worked, nevertheless, it was subsequently difficult to understand how we lived so long below it, gazing at it daily, before we appreciated the fact that here also, although in much lesser degree, were both finished and embryo images. At last one stone was definitely seen to be in the form of a head, and excavation showed it to be an erected and buried statue. A few other figures were found standing and prostrate, and some unfinished images; these last, however,

were in no case being hewn out of solid rock, but wrought into shape out of detached stones. On the whole, it is not probable that this portion was ever a quarry, in the same way as the western side and the interior of the crater. It is, of course, impossible to say what may be hidden beneath the detritus, but the lower part of the cliff is too soft a rock to be satisfactorily hewn, and the workmen appear simply to have seized on fragments which have fallen from above. "Here," they seem to have said, "is a good stone; let us turn it into a statue."

One day, when making a more thorough examination of the slope, our attention was excited by a small level plateau, about half-way up, from which protruded two similar pieces of stone next to one another. They were obviously giant noses of which the nostrils faced the cliff. Digging was bound to follow, but it proved a long business, as the figures it revealed were particularly massive and corpulent. Their position was horizontal, side by side, and the effect, more particularly when looking down at them from the cliff above, was of two great bodies lying in their graves (fig. 73). The thing was a mystery; they were certainly not in a quarry, but if they had once been erect, why had they faced the mountain, instead of conforming to the rule of having their back to it? Orientation could not account for it, as other statues on the same slope were differently placed. Then again, if they had once stood and then fallen, and in proof of this one head was broken off from the trunk, how did it come about that they were lying horizontally on a sloping hill-side? The upper part of the bodies had suffered somewhat from weather, and a small round basin, such as natives use for domestic purposes, had been hollowed out in one abdomen, but the hands were quite sharp and unweathered. We used to scramble up at off moments, and stand gazing down at them trying to read their history.

It became at last obvious they had once been set up with the lower part inserted in the ground to the usual level, and later been intentionally thrown down. For this purpose a level trench must have been cut through the sloping side of the hill at a depth corresponding to the base of the standing images, and into this the figures had fallen. While they lay in the trench with the upper part of the bodies exposed, one had been found a nice smooth stone for household use. A charcoal soil level shewed clearly where the surface had been at this epoch, which

FIG 72.

EXCAVATED STATUE.

South-east side, Rano Raraku. Showing form of hands.

PROSTRATE STATUES, SOUTH-EAST SIDE, RANO RARAKU, AFTER EXCAVATION